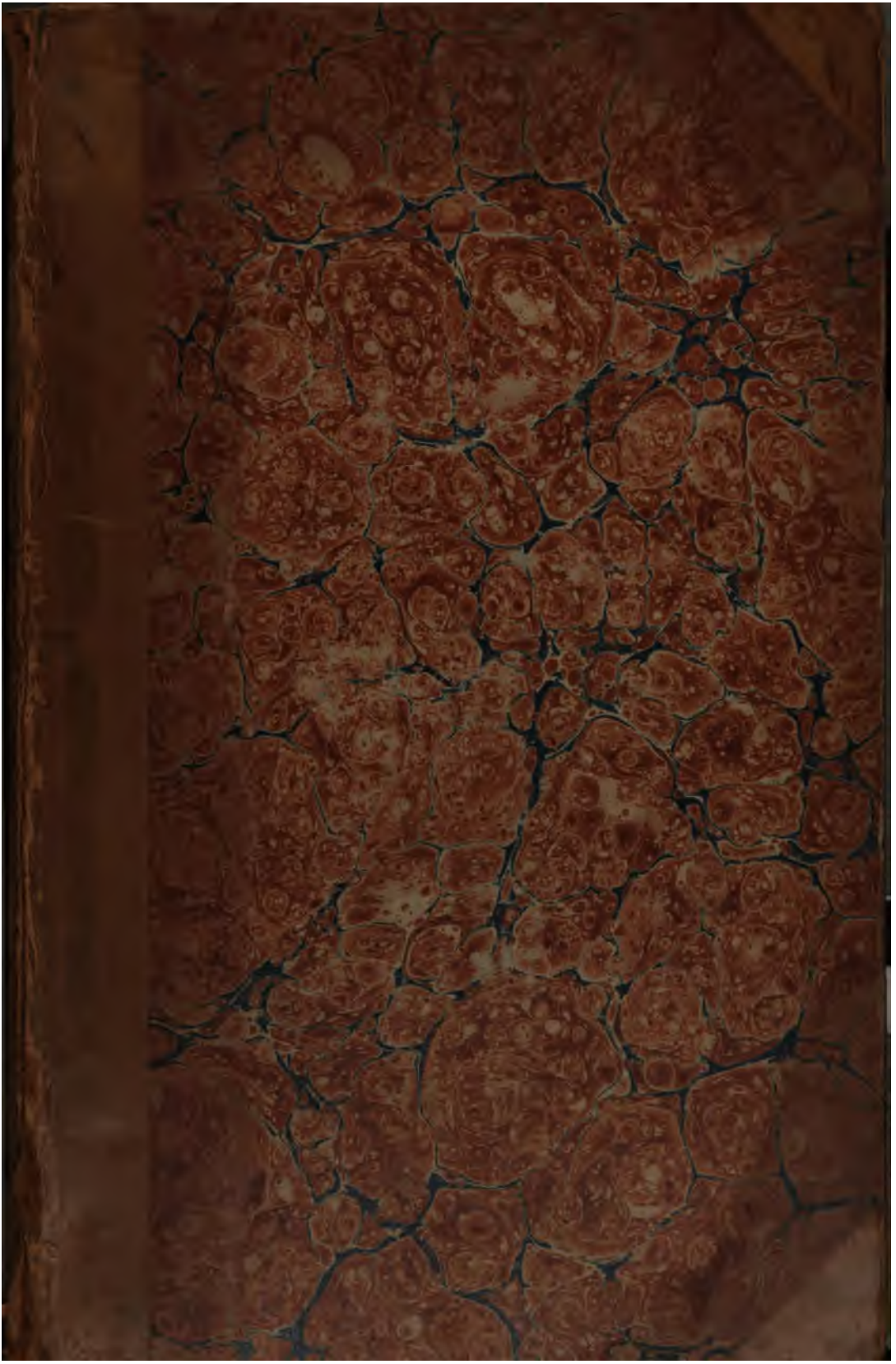

PLANTÆ RARIORES

IN

HIBERNIA

INVENTÆ;

OR

HABITATS

OF SOME

PLANTS,

RATHER SCARCE AND VALUABLE,

FOUND IN

IRELAND;

WITH

CONCISE REMARKS

ON THE

PROPERTIES AND USES OF MANY OF THEM.

BY WALTER WADE, M.D. M.L.S.

LICENTIATE OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS, ETC.

PROFESSOR AND LECTURER ON BOTANY

TO THE RIGHT HONOURABLE AND HONOURABLE THE DUBLIN SOCIETY.

"Ne miremini, quæſo, lubenter me loqui de itineribus intra Patriam capeſſendis: ſuum enim cuique pulchrum eſt; et ſua quemque trahit voluptas. Ipſe meis pedibus circumivi et tranſcendi pruinoſas *Lapponiæ* Alpes; et *Norlandiæ* aſpera juga ſuperavi, clivoſos etiam colles et inacceſſos ejus ſaltus emenſus, &c.

Linnæi Oratio de Peregrinat. intra Patriam; Amoen. Acad. v. 2. 385.

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1804.

PERHAPS it may be neceſſary to premiſe, that I have adopted the univerſally received, and well underſtood word amongſt botaniſts at this day, HABITAT, as in the title page; meaning, the native places of growth, where each ſpecies of plant noticed is to be found in Ireland.

TO THE

RIGHT HONOURABLE AND HONOURABLE

THE

DUBLIN SOCIETY,

THE

ENCOURAGERS

OF

AGRICULTURE, THE ARTS, AND SCIENCES,

THIS CATALOGUE

OF

RARE AND VALUABLE PLANTS,

FOUND IN IRELAND,

IS MOST HUMBLY INSCRIBED,

BY

THEIR MOST DEVOTED,

VERY OBLIGED AND

HUMBLE SERVANT,

WALTER WADE.

DUBLIN,
JUNE 23, 1804.

PREFACE.

As ſome circumſtances have occurred, which may poſſibly prevent the publication of a FLORA HIBERNICA as ſoon as could be wiſhed for, a work for ſome years back amongſt the firſt of my conſiderations, and which I have from time to time announced for publication, as ſoon as genuine and valuable materials could be collected for that purpoſe, conceiving, as I then did, and do ſtill, that no work of a ſimilar nature ought to make its appearance, or be conſidered genuine and valuable, unleſs the author has it in his power to *anſwer* for the HABITATS, or native places of growth, of the different objects noticed; or in ſome

unforeſeen

unforeſeen inſtances, which ſhould be very few, to depend on the kind and liberal communications of profeſſed botaniſts, or botanical amateurs, and not even then, unleſs the communication is accompanied with a living ſpecimen of the plant.

Such precautions, of ſo much import as I conceive, and which, I truſt, will receive the approbation and ſupport of the genuine and true naturaliſt, muſt retard, for ſome time on my part, the publication of a FLORA HIBERNICA.

I am aware, that there are ſome genuine and valuable materials for ſuch a FLORA, in the hands of a gentleman in the northern part of this kingdom, a perſon every way qualified, from induſtry, information, and acuteneſs, for ſuch an undertaking, and it is much to be lamented he does not gratify the botanical world

with

with the result of his researches. Not having the honour of his acquaintance, or pleasure of his confidence, I shall not presume to mention his name; but I should hope, when his leisure permits, that he will follow my example, by publishing the *habitats* of such valuable and scarce plants as he has met with growing wild in Ireland—from such a source, the communication must be highly interesting.

With gratitude I acknowledge, that the Dublin Society has enabled me in some degree to explore some of the most distant parts of Ireland, in search of their vegetable products, (an account of one excursion I have lately published, in the Transactions of the Dublin Society for 1801,*) a suggestion long since proposed by one of its most enlightened, respected, and valuable members, conceiving, as He then did, that

* PLANTÆ RARIORES IN CUNNAMARA INVENTÆ.

that a Flora of Ireland, properly and faithfully executed, on such a principle as that of enabling a person properly qualified, under the auspices of the Society, to examine the different provinces in search of their vegetable productions, would be highly interesting, advantageous, and valuable.

But as such a Flora cannot immediately make its appearance, for reasons already stated, I consider myself called upon, in the interim, to lay before the Society, and the public, the result of those labours in general, which the liberality of the Society has heretofore in a great measure encouraged me to undertake.

The intention of the present trifling publication is to record the native places of growth of some scarce plants found in Ireland: some, likewise, of common occurrence, are noticed, merely because the different British Floras have

considered

considered them as rather rare, and others on account of some valuable properties they possess. I have given only the systematic, and English names, and, in a very few instances, the Irish; all synonyms and descriptions I have omitted, as they will be found more at large in the different Floras, and to avoid enlarging the form of publication unnecessarily. Where any valuable property is attributed to a plant, I have, as before observed, carefully marked it. Whenever I have been obliged to depend on kind communications, such I have acknowledged with respectful gratitude; they will appear to be but very few, because the living plant has not, in general, been sent with the communication. This, I trust and hope, will be a sufficient apology for many omissions.

As to *cryptogamicks*, the investigation of which has now become so interesting and fashionable,

fashionable, though attended with much difficulty, I have touched upon them but slightly, except the order *Algæ*, one genus of which order (Lichen) I consider as meriting every attention, as some of the species afford some beautiful and permanent dyes. Another genus of the same order (Fucus, or sea-wrack) I conceive to be highly valuable in the economy of nature, and it may be made subservient to many useful purposes. I have, therefore, amongst others more rare, introduced all the common and profitable species, which occur on our shores.

In the moss tribe, I must consider my having found the *Buxbaumia aphylla*, as a great acquisition and honour to an Irish Flora, a figure of which I have given.

Such

Such plants as have appeared in a former publication of mine,* I have omitted; except in a few inſtances, where I conſidered them as rather ſcarce, and worthy of other habitats being mentioned of them; ſuch as *Rubia peregrina*, or *baſtard madder*, which perhaps may anſwer all the purpoſes of the more coſtly madder, or Rubia tinctorum.

I have ever conſidered that, however trifling a work may be, clear and copious indexes muſt be very ſatisfactory; and, convinced of their uſe, I preſume to add an Engliſh and Latin one to this little performance.

The abbreviations, I have made uſe of, are for the purpoſe of referring to the different diviſions in the Dublin Society's botanical garden at Glaſnevin, where the ſeveral plants noticed

* CATALOGUS SYSTEMATICUS PLANTARUM INDIGENARUM IN COMITATU DUBLINENSI INVENTARUM.

noticed may all in time be found, and which abbreviations will be explained in the next page.

Upon the whole, then, I ſhould hope, that this Catalogue, for it cannot ſtrictly be called any thing elſe, the firſt attempt of the kind in this kingdom on a general plan, will be the means of inducing others to follow my example, ſo that a FLORA OF IRELAND may appear, which will do honour to the NATION.

DUBLIN,
1804.

ABBREVIATIONS EXPLAINED.

A. Arboretum, or tree division.
F. Fruticetum, or shrubbery.
H. Herbarium, or herbaceous ground.
P. Pecudarium, or cattle ground.
H. T. Hortus tinctorius, or dyer's garden.
FŒ. Fœnarium, or hay garden.
E. Escarium, or esculent garden.
H. H. Hortus Hibernicus, or Irish garden.
H. M. Hortus medicus, or medicinal garden.
G. V. Gramina vera, or true grasses.
A. P. Aquarium palustre, bog and marsh division.
A. L. F. Aquarium lacustre, et fluviatile, aquatic division.
C. Cryptogamia, or cryptogamic division.

ERRATA.

Page 2, line 10, *for* Lafitanica, *read* Lufitanica.
—— 17, line 3, *for* low, *read* late.
—— 18, line 12, *for* livid, *read* liver.
—— 25, line 15, *for Dionæ a, read Dionæa.*
—— 26, line 22, *for* IUNCUS, *read* JUNCUS.
—— 26, ——— *for* flimormis, *read* filimormis.
—— 28, line 6, *for* path, *read* poſt.
—— 32, line 23, *for* SAGI, *read* SAXI.
—— 35, line 8, *for* SELLARIA, *read* STELLARIA.
—— 144, line 17, *for* thisp lant, *read* this plant.

PLANTÆ RARIORES, &c.

No. I.

HIPPU'RIS vulga'ris, *mare's tail.* A. F.

THE Hippuris is not conſidered in England, as a very common plant; I therefore notice it, becauſe it is rather ſo in Ireland on the banks of ſlow ſtreams, and pools of water, flowering about the middle of ſummer. A tranſverſe ſection of the ſtalk forms a beautiful microſcopic object, and the whole plant is conſidered as a weak aſtringent.

II.

VERONI'CA monta'na, *mountain ſpeedwell.* H.—H. H.—P.

Not very rare in many ſhady woods; the wood at Luttrel's-town, county Dublin, affords it in abundance, and about Ballynahinch, Cunnemara, it is common in rather expoſed ſituations. I cannot agree with ſome very reſpectable Engliſh authority, that a chalky ſoil ſeems *beſt* adapted

to it; for in Ireland it is to be met with in a ſtate of great luxuriance in various ſoils, and, as to a chalky ſoil, we are unacquainted with any ſuch, that I know of, in Ireland. In its general habit, it ſomewhat reſembles our common *Veronica Chamædyrs*, or wild germander, the dried leaves of which form ſo excellent a ſubſtitute for tea.

III.

PINGUI'CULA Laſitan'ica, *pale butterwort.* A. P.

Rather common in ſome bogs, and marſhy bottoms with P. vulgaris, as at Woodſtock, county Kilkenny, *William Tighe*, Eſq. Mountmelick-bog —bog of Allen—Ballynahinch, Cunnemara, and many other parts of the county Galway—in the counties of Down, Tyrone, and Derry, it is to be met with frequently, flowering late in the ſummer.

IV.

UTRICULA'RIA vulga'ris, *greater hooded milfoil.* A. P.

In turf holes near Ballynahinch, Cunnemara—bog of Allen—in marſhy ditches at Howth, county Dublin, flowering about Auguſt. The hollow

hollow bags, attached to the leaves, contain air, and a transparent watry fluid, which last, when greatly magnified, appears to contain a quantity of extremely minute *solid* particles.

V.

UTRICULA'RIA mi'nor, *lesser-hooded milfoil.* A. P.

I look upon this as more common than the former, growing in similar situations, and flowering at the same time of the year.

Between Ballinasloe and Shannon-bridge, in the turf-holes on the road-side it occurs in abundance, and about two miles from Ballynahinch, Cunnemara, road to Custrower bay, it covers a small bog-hole. It is likewise to be met with in the bog of Allen, intermixed with Utricularia vulgaris. Old bog-holes, foot of Sleigh Donard, county Down, *John White.*

VI.

CIRCÆ'A alpi'na, *mountain enchanter's night-shade.* H. H. H.

On the public road, Drimcong, between Galway and Oughterard, among the stones, and in various mountainous spots in Cunnemara, flowering in August. Besides its smaller size, it may be rea-

 dily

dily diſtinguiſhed from *C. Luſitanica*, or common enchanter's nightſhade, by its heart-ſhaped leaves.

VII.

SCHOE'NUS maris'cus, *prickly bog-ruſh.*
A. P.

The ſmall loughs and moors, between Ballynahinch and Oughterard, afford it in abundance. It ſerves for thatching, inſtead of ſtraw, as it grows very high, ſometimes five or ſix feet, and the lower leaves three feet long.

VIII.

SCHOE'NUS al'bus, *white headed bog-ruſh.*
A. P.

At the foot of Lettery mountain, Ballynahinch, Cunnemara, on a turfy marſh, flowering in Auguſt.

IX.

SCHOE'NUS ru'ſus, *brown bog-ruſh.*

Found in the marine marſhes, near Cuſtrower bay, Ballynahinch, Cunnemara, and likewiſe in the county of Antrim, but I forgot to notice its habitat. Doctor Smith obſerves, that this

this *Schœnus* has often been described for the *S. ferrugineus*, which is supposed to have never been found in Britain.

X.

I'RIS fœ'tidissima, *stinking Iris, or gladwyn, roast beef plant.* H.—H. H.—P.—H.T.

Irish, Blericum.

This perennial, which flowers in June, is easily distinguished from the common yellow Iris or flagger, by the colour of the flower, which is of a heavy blue, and the peculiar smell of the leaves when bruised, resembling, in some degree, roasted beef; hence one of the English names.

On Ireland's Eye, Howth, and at Fossaro, to the Southward of Bray, county Wicklow. In Ennis church-yard, county Clare.

Swine bitten by a mad dog have escaped the disease, by taking the fresh roots mixed with their food, whilst others bitten by the same dog died raving mad. They are used to dye black.

XI.

SCIR'PUS flu'itans, *floating club-rush.* A. F.

Found in stagnant pools, near Turc bridge, Killarney, county Kerry. In the marshy grounds at

at Howth, and Cardiff's bridge, county Dublin, and in many parts of the county Galway.

XII.

SCIR'PUS acicula'ris, *least club-rush.*
A. P.

In marshy and heathy spots near Ballynahinch, Cunnemara, but not in any quantity, flowering in August. *Withering*, following *Haller* and *Retzius*, considers this species of Scirpus as a Cyperus.

XIII.

PHAL'ARIS arena'ria, *sea Canary grass.*
H.—H. H.—G. V.

On the sandy sea shore at Howth, county Dublin. This delicate canary grass is an annual, and flowers in July.

XIV.

LO'LIUM temulen'tum, *annual darnel grass.*
H.—G. V.—H. H.

This species of darnel is sometimes common in corn fields. I notice it, because it is well known in most counties in Ireland, by the name of *Rileh* and *Rivery*, for its intoxicating quality, whether taken in bread or drink; swine have

been

been known to be ſeized with a temporary blindneſs and drunkenneſs, when it was mixed with their food. "Made into bread, with a ſmall proportion of wheat, and often eaten, produced vomiting, purging, violent cholics, and death."——*Monthly Review*, vol. 67. p. 559.

XV.

FESTU'CA calama'ria, *reed-like feſcue graſs.* H.—G. V.—H. H.

Whether a Feſtuca, or Poa, it is not my buſineſs at preſent to determine; but as an excellent figure of this graſs appears in the 14th vol. p. 1005, of Engliſh Botany, I ſhall adopt this name given to it by Doctor Smith. In the Species Plantarum, by *Willdenow*, vol. 1. p. 389, it will be met with under the name of *Poa trinervata.* In addition to its being found in a wood, near Newtown-Barry, by the Rev. Mr. Butt, I may venture to aſſert, that this new graſs is not uncommon in Ireland. The woods at the Dargle, county Wicklow, and thoſe near Derry, and Roſs-Trevor, afford it in abundance; a perennial, and flowers in June.

FESTU'CA

XVI.

FESTU'CA vivi'para, *viviparous fescue-grass.*
H.—H. H.—G. V.

Rather common on the summits of all our high mountains—on Mangerton and Purple mountains, Killarney. Mr. Gough, in Withering, observes, that this viviparous fescue, brought from the highest hill in Westmoreland, and planted in his garden, continued viviparous for three or four years, and he would seem to hint that it is uniformly so. Common on the mountains of Mourne, *John White.*

XVII.

AI'RA flexuo'sa, *waved mountain hair-grass.*
H.—H. H.—G. V.

In sandy heathy situations, at Ireland's Eye, Howth, flowering in July, a perennial.

XVIII.

PO'A dis'tans, *reflexed meadow-grass.*
H.—H. H.—G. V.

In the sands at Howth, and Northwall, county Dublin, abundantly; a perennial, and flowers about August.

PO'A

XIX.

PO'A nemora'lis, *wood meadow-grass.*
G. V.—H. H.—H.

In shady situations, between Luttrel's-town and Lucan, county Dublin; a perennial, and flowers in July. In a wood on the side of Knock-cree mountain, county Down, *John White.*

XX.

PA'NICUM sanguina'le, *cock's-foot panick-grass.*
G. V.—H. H.—H.

A few specimens of this very scarce grass were found on the sand-hills of Dough, county Clare.

XXI.

ROTBO'LLIA incurva'ta, *sea hard-grass.*
G. V.—H. H.—H.

This annual, which perfects its flowers about the latter end of August, is to be met with at Howth, near the sea shore, Sutton side, but not in any quantity.

XXII.

PHLE'UM alpi'num, *alpine cat's-tail grass.*
G. V.—H. H.—H.

Near the summit of Lettery mountain, Ballynahinch, Cunnemara, a few specimens, flowering in August.

AGROSTIS

XXIII.

AGRO'STIS min'ima, *ſmall bent graſs.*
G. V.—H. H.—H.

This elegant little graſs, found in the ſame ſituation with the former, and flowering at the ſame time.

XXIV.

BRO'MUS racemo'ſus, *ſmooth brome graſs.*
G. V.—H. H.—H.

I have always taken this Bromus to be the B. mollis, until convinced to the contrary by the excellent figure and deſcription given of it in Eng. Bot. vol. 15, p. 1079. It is by no means uncommon on arable land, in the county of Dublin; the different grounds about the botanic garden, Glaſnevin, before they were cultivated for botanical purpoſes, particularly that which borders the river, produced many ſpecimens of it.

XXV.

PLANTA'GO Loeflingii, *Wilden. Sp. Pl.* 1. 649. H.—H. H.

Wildenow, I preſume to think, very properly conſiders this plantain as a diſtinct ſpecies, the variety *Loeflingiana*, of Hudſon's Plantago maritima.

Found

Found in ſeveral places, Cunnemara, county Galway, on the banks and margin of old ditches.

XXVI.

EX'ACUM filifor'me, *leaſt Gentianella.* H.—H. H.

A very rare and curious little plant, about three inches high, was found in Durſey iſland, county Cork, on a high dry bank oppoſite the main land, not far from the church in ruins, *J. Blaſhford Eſq.*—an annual, and flowers in Auguſt. Doctor Smith was the firſt who removed this plant from the genus Gentiana.

XXVII.

RUP'PIA mari'tima, *ſea Ruppia, taſſel pond weed.* H.—H. H.

With ſome difficulty this plant, which ſomewhat reſembles Potamogeton marinum, was detected in the ſalt water marſhes at the North wall.

It is not aſcertained, whether it be an annual, or perennial; as it was not got in flower, I cannot determine the flowering time with us.

CEN-

XXVIII.

CENTUN'CULUS min'imus, *ſmall centunculus.* A. P.

This plant, which is hardly an inch high, was found in the moiſt turfy ſands near Ballynahinch, Cunnemara; flowering in Auguſt.

XXIX.

ASPE'RULA cynan'chica, *ſquinancy wort.* H.—H. H.

Found in rocky places, chiefly on moſſy tufts in Glanquin, and ſeveral other parts of the barony of Inchiquin. On the ſandy banks, along the ſea ſhore at Aughris, Cunnemara; flowering in Auguſt and September.

XXX.

GA'LIUM borea'le, *croſsleaved ladies' bed-ſtraw.* H.—H. H.—H. T.

Is very common in mountainous places, county Galway, about the various loughs in rocky ſhady ſpots; the different iſlands on Lough Corib ſupply it in abundance; flowering in September.

ber. The roots have the quality of dyeing red, like the common G. verum, or yellow ladies' bed-ſtraw.

XXXI.

RU'BIA peregrina, *wild madder.*
H.—H. T.

This wild Madder, the roots of which poſſeſs the property of dyeing red like the true Madder, or Rubia tinctorum, is to be found in abundance growing among the buſhes at Roſs, Muqruſs, and Ennisfallon, near Killarney. It is likewiſe to be met with, but not in quantity, on the Hills of Howth, and Dalkey, county Dublin; flowering in Auguſt *.

XXXII.

ALCHEMIL'LA alpi'na, *alpine ladies'-mantle.*
H.—H. H.

The rocky high mountain of Mam Turc, Cunnemara, and Joyce country, affords this elegant alpine plant in abundance. On the rocks at Cong, county Mayo, nothing can be more common; flowering in September.

SAGI-

* Cat. Pl. Dub. 40.

XXXIII.

SAGI'NA ceraſtoi'des, *mouſe-ear pearl wort.* H.—H. H.

The preſent plant would almoſt tempt me into giving an opinion as to the claſs, and order in which it ſhould be placed, as well as of its generic and ſpecific character, but as a ſimple account of the *habitats* of certain rare plants, which are to be met with in Ireland, is merely my object in the preſent publication, I ſhall carefully avoid hazarding any opinion. I have retained the firſt name given to this plant in the III. vol. of Engliſh Botany, 166. In the Flora Britannica of the ſame Author, p. 498, it is removed to the claſs and order Decandria Pentagynia, under the name of Ceraſtium tetrandrum, or tetrandrous mouſe-ear chickweed, a name which the late much-to-be lamented Mr. Curtis had given it, accompanied with a moſt characteriſtic figure, in the II. volume, pl. 429, of that moſt valuable and excellent performance, the Flora Londinenſis.

On the ſandy ſhore between Clontarf and Howth, County Dublin, common, and in many other places in Ireland. An annual, and in full flower in July.

LITHO-

XXXIV.

LITHOSPER'MUM arven'ſe, *corn gromwell, baſtard alkanet.* H.—H. H.—H. T.

This annual, which flowers in May, is to be met with in abundance in the cultivated fields at the foot of the Three-rock mountain, county Wicklow. The bark of the root tinges wax, and oil of a beautiful red.

XXXV.

LYSIMA'CHIA vulga'ris, *yellow looſe-ſtrife.* H.—H. H.—A. P.

I don't take this elegant ſpecies of looſe-ſtrife, (whoſe ſtems frequently riſe to nearly the height of three feet) to be ſo very common. The bog of Ballyphahane, near Cork, furniſhes it but in ſmall quantities. Upon the eaſt bank of a lough adjoining the lands of Drumkevan, near Ennis, county Clare, flowering in July. Bilberry iſland, Lough Corib, and near the bridge of Ballinaſloe, in the marſhes and waters, flowering in September.

PUL-

XXXVI.

PULMONA'RIA marit'ima, *ſea lang-wort.* H.—H. H.

So late as the firſt week in October, found it in flower, and but very ſparingly, on the ſhore near Hampton bank, about a ſhort mile from Balbriggan; and at Lough Sheeny, Tummontown, or Land of Lane, (as they are generally called,) between the two lime kilns on the ſhore, within about a mile or rather more of Skerries, county Dublin. Abundantly along the gravelly ſhore ſide between Green Caſtle and the Light Houſe, county Down. *John White.*

I can have no doubt of its being perennial. It is conſidered as one of the moſt beautiful indigenous plants we have. Mr. Atkinſon obſerves, that the corolla before it expands is pink, immediately after changing to a fine blue.

XXXVII.

CAMPA'NULA hedera'cea, *ivy leaved bell-flower.* A. P.

Found in a low ſwampy field, near the old millſtream at the back of the old houſe of Barley-field,

ley-field, near Ballybritton, and about five miles from Bandon, County Cork—a perennial, and flowers so low as August, *Doctor Vine, Limerick.*

XXXVIII.

DATU'RA stramo'nium, *thorn-apple.* H.—H. H.

A very poisonous annual, which flowers in August, abundantly about the river Lions, King's County. It would now appear to be naturalized in Europe, although a native of America.

XXXIX.

SOLA'NUM Dulcama'ra, var. *marit. Ra. Syn.* 263, *sea woody night-shade.* F.—H. H.

On the beach at Renvi, Cunnemara, common, flowering in September; though Hudson says, *in littoribus maritimis passim,* I have reason to think it is a scarce plant.

XL.

RHA'MNUS cathar'ticus, *purging buck-thorn.* F.

In the hedges and woods, and but sparingly about Killarney. The saffron-coloured juice of

 the

the *unripe* berries of buck-thorn is uſed for ſtaining maps or paper, and which berries are the French berries of the druggiſts ſhops. The juice of the *ripe* berries with alum, is the ſap green uſed by painters. The bark of the buck-thorn is ſaid to afford a beautiful yellow dye.

XLI.

PRI'MULA vulga'ris, var. 2, *Withering.* H.—H. H.

This elegant variety of the common primroſe with lilac-coloured flowers, and which I ſuppoſe is the variety with bloſſoms of a red lived colour, noticed by Withering, was found by *John White*, at the foot of Saddle and Trumpet mountain, county Louth.

It is worthy of remark, that the leaves of the common primroſe anſwer extremely well for feeding ſilkworms. Trans. of Soc. of Arts, II. p. 157.

XLII.

AT'ROPA Belladon'na, *devale, or deadly night-ſhade.* H.—H. H.—H. M.

One of the moſt powerful narcotick poiſons we have indigenous. Found at Stradbally, by the brook ſide where an old monaſtery ſtood, abundantly.

abundantly. The juice of the ripe berries is ſaid to ſtain paper of a beautiful and durable purple. A perennial, and flowers in July.

XLIII.

LONICE'RA Pericly'menum, var. *foliis quercinis, oak-leaved common honey-ſuckle.* F.

This variety of the common honey-ſuckle, with oak-ſhaped leaves, is to be found along the ditches in the fields near Faſſaro, County Wicklow.

XLIV.

GENTIA'NA ver'na, *ſpring gentian.* H.—H. H.

A very elegant and very ſcarce perennial, which covers the ſterile mountains and a few marſhy ſituations near Caſtle-taylor, County Galway, in the month of May. It is obſerved, that this ſpecies of Gentiana and the G. bavarica are nearly allied.

XLV.

SI'UM latifo'lium, *broad leaved water-parſnip.* P.—H.—H. H.—A. P.

The roots are ſuppoſed to be of an acrid poiſonous quality. The bog of Curragha, county

Dublin, affords it in abundance, and it is likewise to be met with at Howth in marshy situations, but sparingly. Near Tuam, and abundant in the boggy ditches on the road side between Milough and Ballinasloe. A perennial, and flowers in August. The roots are highly noxious to cattle.

XLVI.

SI'UM re'pens, *creeping water-parsnip.* H.—H. H.—A. P.

Found this with the former; a perennial, and flowers in July. It is much smaller than *Sium nodiflorum.* Marshy spots along the river side, Kirkeel, county Down, *John White.*

XLVII.

PHELLAN'DRIUM aquati'cum, *water hemlock.* H.—H. H.—A. P.

Irish, Fealla bog.

The marshy ditches about Tuam, county Galway, and the waters near the bridge of Ballinasloe, and Newtown-bridge near Trim, county Meath; and all along the river Boyne abound with it. It was formerly supposed to be a fatal poison to horses, occasioning them to become paralytic; but this paralytic affection is now ascertained to be brought about by an insect, which generally inhabits within the stems; the usual remedy is pigs dung.

ŒNAN'THE

XLVIII.

ŒNAN'THE peucedani'folia, *ſulphur wort: water dropwort.* H.—H. H.—A. P.

In marſhy ſituations—common near the coaſt between Balbriggen and Skerries, and on Lambay iſland. A perennial.

XLIX.

CORIAN'DRUM fati'vum, *common coriander.* H.—H. H.—H. M.

This plant, when bruiſed, is very fetid; an annual, and to be found on the ſhore between Clontarf and Howth; and on the ground to the right from the upper end of Townſend-ſtreet to the draw-bridge going to Ringſend; flowering in July.

Coriander-ſeeds have been conſidered as ſuſpicious, if not deleterious; but the late Doctor Withering has known ſix drams of them taken at once without any remarkable effect.

L.

CAR'UM Ca'rui, *common caraway.* H.—H. H. H. M.

Found near Cloonſkeagh; in a field near Chapelizod; on a bank near the brick-fields; beyond Ringſend;

Ringſend; and at the north end of Lucan bridge, county Dublin. A biennial, and flowers in July.

LI.

PIMPI'NELLA mag'na, *great burnet ſaxifrage.* H.—H. H.

In the hedges about Fryar's walk, Cork, this perennial is to be met with abundantly, flowering early in July. About the high road, Roſstrevor, county Clare, Dangen beyond Galway, and at Cong, county Mayo, in profuſion. The root is very acrid, burning the mouth like pepper, and affords a blue oil, according to Withering.

LII.

PIMP'INELLA dioi'ca, *dwarf burnet ſaxifrage, rock parſley.* H.—H. H.

The paſture fields near the church of Athboy, county Meath, furniſh it in great quantities; this plant has been found only in two places in Britain, on the limeſtone rocks below Briſtol, and near Uphill, Somerſetſhire. A very remarkable circumſtance of this umbelliferous plant is, that it bears male flowers on one root, and female

on

on another, and hence the trivial name *dioica*; A perennial, and flowers in May.

LIII.

CORRIGIO'LA littora'lis, *ſand ſtrapwort.* H.—H. H.

This very rare plant, not to be found in the Flora of Hudſon, though he was the firſt diſcoverer of it in England, is to be met with on the ſandy beach, the Sutton ſide of Howth, county Dublin; an annual, flowering in Auguſt. Doctor Withering obſerves, that in Portugal it is not limited to the ſea ſide, but grows in hedge-banks, and ploughed fields at a diſtance from the ſea.

LIV.

SAMBU'CUS E'bulus, *dwarf elder, danewort.* F.

The whole plant is very purgative, and poſſeſſes a very heavy diſagreeable ſmell. No ſpecies of cattle will eat it; moles will not approach the ſpot where it is laid. It is however a very ſerviceable diuretic; the berries give a violet colour. The Sileſians are ſaid to ſcatter the green leaves where their pigs lie, in order to prevent ſome of the diſeaſes to which they are liable; certain it is, that the green leaves drive away

mice

nice from granaries. On the ſtand of Lambay, facing Ruſh, county Dublin, it occurs in great profuſion.

LV.

LI'NUM anguſtifo'lium, *narrow leaved pale flax.* H.—H. H.

On Knockmaroon-hill, road to Lucan, county Dublin, flowering in Auguſt. Steep banks between Clontarf and Howth, *John White.*

LVI.

LI'NUM Radi'ola, *leaſt rupture-wort.* H.—H. H.

In boggy ſituations, along the ſides of the rivers about Kirkeel, and on the lands of Murlagh, below Newcaſtle, county Down, *John White.*

Doctor Smith in his Eng. Bot. p. 13. 893, adopts the old name, Radiola millegrana.

LVII.

DRO'SERA Ang'lica, *great ſun-dew.* A. P.

In the boggy marſhes, near Ballynahinch, Cunnemara, with the two common ſpecies of Droſera, flowering late in Auguſt. Very ſimilar to the

common

common ſpecies, but in every reſpect larger. Though the whole plant, of this, and the common ſpecies is acrid, and corrodes the ſkin—yet ſome ladies know how to mix the juice with milk, ſo as to form a ſafe coſmetic to remove freckles and ſunburn. Mr. Whately of London has obſerved, that the leaves of all the ſpecies of ſun-dew have a ſimilar moving power to the leaves of the wonderful *Dionæa muscipula*, or Venus's Fly-trap, a native of the bogs of Carolina, a very correct figure of which is given in Darwin's beautiful and eccentric poem, *The Loves of the Plants*, p. 16, *Nat. Miſcell.* vol. 2. t. 40.

The ſurface of the leaves of *Dionæ a muſcipula* are irritable in the higheſt degree, for when an inſect alights on a leaf, it is caught as effectually as a mouſe in a mouſe-trap.

LVIII.

SCIL'LA ver'na, *vernal ſquill.* H.—H. H.

Abundantly on the rocks, and dry mountainous paſture grounds, near the Giant's cauſeway, county Antrim, flowering early in May. On the dry paſture ground to the weſt of the light-houſe, Howth, and on Ireland's eye, county Dublin.

IUN-

LIX.

IUN'CUS uligino'ſus, *little bulbous ruſh.*

——— ſquarro'ſus, *moſs ruſh, gooſe-corn.*

——— acu'tus, *great ſharp ruſh.*

——— bulbo'ſus, *round fruited ruſh.*

H.—H. H.

All to be found at Howth, or along the ſhore between Clontarf and Howth; particularly the latter in great quantity.

LX.

IUN'CUS campeſtris, var. *β. of Hudſon.*

H.—H. H.

On marſhy boggy ground, Mangerton mountain, Killarney, common; flowering in Auguſt.

LXI.

IUN'CUS tri'fidus, *three-leaved ruſh.*

A. P.

In the marſhy grounds at the foot of Mangerton mountain, Killarney; and on many of the boggy mountains, Cunnemara.

LXII.

IUN'CUS fli'formis, *leaſt-ruſh.*

H.—H. H.

On Lettery mountain, Cunnamara. It is the moſt delicate ruſh that can be conceived.

IUN-

LXIII.

IUN'CUS triglu'mis, *three-flowered rush.*
H.—H. H.—A. P.

Common with the former, and about the rills, and marshy spots on the Dublin mountains; flowering in August.

LXIV.

RU'MEX marit'imus, *golden dock.*
H.—H. H.

In the marshes within the reach of the sea at Howth; flowering in August. I don't think it a very common plant in inland situations, therefore I notice it. Perennial.

LXV.

RU'MEX aquati'cus, *great water dock.*
A. P.—H.—H. H.

This very useful, and powerful vegetable astringent, is to be met with abundantly in the marshes, and by the sides of the Clady water to the west, not far from Portglanoon, county Antrim; flowering in August. In the waters, near the bridge of Ballinasloe, with *Lysimachia vulgaris*, and *Phelandrium aquaticum.* Near Clonee, county Waterford. The root, pulverized, is perhaps the safest and best dentifrice we have.

ALIS'MA

LXVI.

ALIS'MA na'tans, *floating water plantain.* A. F.

In drains, near an old mill-dam, not far from Balruddery, between the Man of War and Balbriggan public path road, this ſcarce and curious water plantain is to be met with. Not having ſeen it in flower, I cannot determine the period of its flowering in this ſituation.

LXVII.

ERI'CA Daboe'cia, *Iriſh heath.* F.

To the botaniſt, who may travel in ſearch of plants, through the romantic diſtrict of Cunnemara, county Galway, the immenſe quantity of this beautiful and truly indigenous heath will fill his mind with aſtoniſhment, being nearly as abundant as the moſt common heath we have, flowering for ſome months—ſo late as the middle of September, I parted with it in full flower!

The hiſtory of this heath appears to me not to be well underſtood, and the charm which Ray has attributed to it, however ludicrous, as noticed in *Eng. Bot.* Vol. I. 35, I could not trace in any

any ſhape whatſoever in Cunnemara. In another place I ſhall endeavour to give a true hiſtory of *Erica Daboecia*, as I am collecting materials for that purpoſe. Certain it is, that on the celebrated *Lough Dearg*, county Donegal, there is a very large iſland called *St. Daboec's* iſland, and on which a *St. Daboec* founded a priory at a very early date, I believe about the year 490. Whether the *Erica Daboecia* is to be met with on this iſland, remains ſtill to be aſcertained.

LXVIII.

VACCI'NIUM vitis idæ'a, *red whortle-berry, crow-berry.* F.

The rocky mountains of Burrin, county Clare, are covered with this very delicate ever-green, where it is called ceapa borne, *Keora Borne*, flowering in May, and perfecting its fruit in July. It is likewiſe to be met with on the edges of Upper Lough Bray, near Powerſcourt, county Wicklow. Clifts of Scallirea rocks W. of Boncom mountain, and on Carius rocks, Slievenamhady, or the dog's mountain, county Down, *John White.*

LXIX.

VACCI'NIUM oxycoc'cos, *cran-berry.* F.

To be met with in many of the turfy bogs—bog of Allen, common. The Swedes uſe the ber-

ries

ries to boil ſilver plate to its proper whiteneſs, *Eng. Bot.* Vol. V. 319.

LXX.

AR'BUTUS U'nedo, *common Arbutus, or ſtrawberry tree.* F.

This aboriginal beautiful ever-green of Greece is now unequivocally aſcertained to be indigenous in that part of the county Kerry, called Killarney; it decorates the faſcinating lakes of this enchanting ſpot, hanging from the crevices of the ſeemingly barren limeſtone rocks in the greateſt ſtate of luxuriance and beauty, with hardly any earth about its roots. I am told that it is to be met with at Glengariff, and in all the mountainous ſituations to the weſt of Bantry bay, county Cork.

LXXI.

AR'BUTUS Uva ur'ſi, *red trailing Arbutus.* F.

It ſpreads to a vaſt degree on the limeſtone rocks on the Burren mountains, county Galway, where it is called *Burren myrtle.* Very common on the mountains of Cunnemara, and the different iſlands on the coaſt, particularly Buffin—no veſtige

of

of flower in September. It has been much eſteemed in nephritic complaints, and particularly ſerviceable in tanning leather, being highly aſtringent.

LXXII.

ANDRO'MEDA polifo'lia, *marſh Andromeda.*
F.

This pretty ſhrub is to be met with in many bogs—the bog of Allen furniſhes it in abundance, flowering in July.

LXXIII.

BU'TOMUS umbella'tus, *flowering ruſh.*
A. F .L.

This highly ornamental aquatic decorates the margins of the ditches and marſhes in ſeveral places about the Shannon. In a broad ditch on the road leading to Carbally-bridge, Limerick, *Doctor Vize.*

In the marſhes about the river Fergus, particularly between Ennis and Clonrode. This ſtately aquatic is ſo hardy as to bear the cold of Lapland.

MONO-

LXXIV.

MONO'TROPA hypop'ithys, *yellow bird's-neſt.*

H.—H. H.

Growing at the foot of old pine trees, at the Marquis of Drogheda's, Moore Abbey, county Kildare, flowering in July. It ſmells like bean bloſſoms.

LXXV.

SAPONA'RIA officina'lis, *common ſoap-wort.*

H.—H. H.

Abundantly in the copſes, and on the brink of the river about Ball's-bridge, and all along the river Dodder, county Dublin.

It is probable that it was planted ſome years back in this ſituation, as there have been, and ſtill are, bleach-greens and manufactories for printing linen and cotton, along the banks of the river Dodder; and the known property, which *ſoap-wort* poſſeſſes of raiſing a lather like ſoap when bruiſed and agitated with water, and ſo frequently uſed for cleaning clothes, may be the chief cauſe of its appearing ſo abundantly in this ſpot.

SAGI-

LXXVI.

SAXI'FRAGA ſtella'ris, *hairy ſaxifrage.* H.—H. H.

On the margins of rills, to the north of Mangerton mountain, Killarney, pretty common, flowering in Auguſt.——I may obſerve, that it is to be met with in the greateſt quantity near the Devil's punch-bowl, the ſummit of the mountain.——Shady clifts in Sleigh no Gloch, and many more of the mountains of Mourne. *John White.*

LXXVII.

SAXI'FRAGA umbro'ſa, *London pride, none ſo pretty.* H.—H. H.

This alpine beauty covers almoſt every ſpot about the lake of Killarney; and what appeared to me very ſingular in Auguſt 1796, when I viſited this place, was, that on Mangerton mountain the flower appeared to have juſt expanded itſelf, whilſt on the oppoſite mountain Turc, (a road only dividing them) where it grows in great abundance, the ſeed was perfectly formed, and appeared to have been in that ſtate for ſome time.

It has only lately been found growing wild in England, but of which circumſtance I have ſome

 doubts.

doubts.* Very common throughout Cunnemara, county Galway.

LXXVIII.

SAXI'FRAGA hypnoi'des, *moſſy ſaxifrage, or ladies cuſhion.* H.—H. H.

This ſaxifrage clothes the rocks about the Giant's cauſway, county of Antrim, flowering in May; likewiſe the hill of Knocknenny, county Fermanagh.—Knockmai mountain, near Tuam.

LXXIX.

SAXI'FRAGA oppoſitifo'lia, *purple ſaxifrage.* H.—H. H.

At the ſummit of Bulben mountain, Ennis Owen, *Mr. Browne*; who very kindly gave me a ſpecimen, from that place, of this very rare and ſingular ſpecies of ſaxifrage, being the only one with purple flowers, of Britiſh growth.

LXXX.

SILE'NE nu'tans, *Nottingham catch-fly.* H.—H. H.

Found it but ſparingly on the old walls, thickly covered with lime very near Iſland-bridge, and by the way ſide near St. Margrett's, county Dublin. Flowering early in June.

SILE'NE

* See Engliſh Botany, vol. 10. 663.

LXXXI.

SILE'NE An'glica, *Engliſh catchfly.*
H.—H. H.

This ſpecies of Silene, by no means common, was found in fields along the ſhore ſide, about Kerkeel, county Down, *John White.*

LXXXII.

SELLA'RIA glau'ca, *glaucous marſh ſtitchwort.*
H.—A. P.—H. H.

In Curragha bog, county Dublin; flowering in July, with Stellaria graminea. Sides of rivulets, Renvi, Cunnemara. Tinure bog, county Louth, *John White.*

Mr. Browne ſays that the ſtems and leaves appear under a lens to be ſprinkled with numerous minute white dots, and that its glaucous colour is owing to this circumſtance.

LXXXIII.

SE'DUM Teleph'ium, *Orpine, or live long.*
H.—H. H.

Covers the walls of an old fort, called Cahiremond, near Kilfenora, county Clare; flowering in Auguſt.

A decoction of the leaves is ſaid to be a very ſerviceable, and forcible diuretic.

LXXXIV.

SE'DUM daſyphyl'lum, *thick leaved ſtone-crop.* H.—H. H.

On old walls flowering copiouſly in June, near Blarney caſtle, county Cork.

LXXXV.

EUPHOR'BIA Portlan'dica, *Portland ſpurge.* H.—H. H.

Found on the ſhore at Killiney-bay.—Between Clontarf and the warren houſe, and the Sutton ſide of Howth; likewiſe on Ireland's-eye, flowering late in Auguſt. It is obſerved, that at the baſe of the flower are ſeveral flat, ſlender, ſkinny woolly ſubſtances, cloven at the end.

LXXXVI.

EUPHOR'BIA Hiber'nica, *Iriſh ſpurge.* H.—H. H.

It grows in immenſe quantities on the public road between Cork and Killarney, and all about Killarney; the ſeed perfectly formed in Auguſt.

Not

Not known by the name of *Makinboy*, in the neighbourhood of Cork, or Killarney. I ſhall ſhortly give a further account of this Iriſh ſpurge, with a figure of it; which latter circumſtance appears to me to be very much wanting, no good or correct figure, that I know of, having as yet made its appearance, in the ſtate in which it is to be met with in Ireland.

LXXXVII.

PRU'NUS inſiti'tia, *Bullace tree.* A.

Found on Bilberry iſland, Lough Corib. The bark of the roots and branches is conſiderably ſtyptic.

LXXXVIII.

CRATÆ'GUS A'ria, *white beam tree.* A.

In the hedges to the weſt ſide of Howth; flowering in June. Many places in Cunnemara; and about Killarney. From the fruit of the beam tree an ardent ſpirit may be diſtilled, and *Mr. Gough* ſays, that the wood of this tree affords an excellent charcoal for making gun-powder.

SOR'BUS

LXXXIX.

SOR'BUS aucupa'ria, *mountain ash.*

A.

This very pleasing tree is to be met with pretty commonly about Killarney in the woods, and some of the mountains. The berries, which ripen about September, afford a jelly not unpleasant, which is prepared from them in the Highlands of Scotland with sugar, according to *Doctor Smith*—the berries likewise, dried and reduced to powder, make wholesome bread, and an ardent spirit may be distilled from them, which is said to have a fine flavour.

XC.

SOR'BUS domes'tica, *true service tree.*

A.

This rare tree grows by the way side in a copse between Maryborough and Mountmelick; and also at river Lyons.

XCI.

RO'SA villo'sa, *apple rose.* F.

It surprised me somewhat to meet with the garden rose in full flower in July at Ireland's eye, Howth; at the same time I can have no doubt of its being perfectly in a wild state.

RO'SA.

XCII.

RO'SA lut'ea, *yellow rose.* F.

I set this down, with some doubts of its being indigenous, although I met with it in flower in August, near Ballyhill, Carrickfergus, far removed from any garden.

XCIII.

RU'BUS cæ'sius, *dew-berry bush.* F.

In the county Galway, not unfrequently, on the borders of fields. Knockmai-mountain, near Tuam, *John White.*

XCIV.

RU'BUS idæ'us, *rasp-berry.* F.

Very common in Ireland, particularly in the counties of Cork, and Kerry; and abundantly at Glann Cree, and many other places about Powerscourt, county Wicklow.

The fresh leaves are said to be very much liked by kids.

POTEN-

XCV.

POTENTIL'LA frutico'ſa, *ſhrubby cinquefoil.*
P.—H. H.—F.

This ſhrubby cinquefoil is to be met with abundantly in the barony of Burren, the S. E. ſide, where it joins the barony of Inchiquin. Among the rocks, on the romantic banks of Lough Corib, near Sir John O'Flaherty's Lemonfield, Oughterard, Cunnemara.

XCVI.

RU'BUS ſaxat'ilis, *ſtone bramble.*
F.—P.

Moſt mountainous ſituations in Ireland afford this bramble—between the rocks, Roſs iſland, Killarney; and in all the limeſtone cragg, county Clare, it is abundant. On Kilgobbin mountain, to the weſt of Kilgobbin, county Dublin, it is to be met with but ſparingly; flowering about July. Among the ſtones on the ſides of the mountains, county Galway—Bilberry iſland, Lough Corib.—The commons of Killinboy, barony of Burren, afford it in great profuſion.

XCVII.

DRY'AS octopet'ala, *mountain Dryas, or avens.*
H.—H. H.

This very beautiful, and ſcarce alpine plant, covers the face of the lime-ſtone rocks in many places

places on the Burren mountains, county Clare, where it is called *wild betony*. At Polophouca near Churchhill, county Fermanagh, between Enniſkillen and Ballyſhannon, on the rocks. *Bindon Blood, Eſq.* a member of the Dublin Society, informs me, that it is known in Burren, by the Iriſh name of *Freaghuagour, Feeſoguealiegha, or Leighheen.*

XCVIII.

PAPA'VER Cam'bricum, *yellow Poppy.*
H.—H. H.

This ſcarce perennial ſpecies of poppy was found in abundance in the deep vallies, along the mountains above Roſtrevor, county Down, by *John White*, one of the aſſiſtants to the head gardener at the botanical garden, Glaſnevin, whom I have noticed before.

XCIX.

ANEMO'NE Apenni'na, *blue mountain Anemone.*
H.—H. H.

Though this elegant ſpecies of Anemone has been for a length of time obſerved in a perfectly wild ſtate, growing in ſhady ſpots about the botanical garden Glaſnevin, flowering in March, and long before the ground was converted into a botanical garden, yet I cannot take upon me to ſay, that

that it ſhould be conſidered as truly indigenous—indeed I have ſtrong doubts that it is, ſtrictly ſpeaking, a native either of England or Ireland.

C.

THALIC'TRUM alpi'num, *alpine meadow rue.* H.—H. H.

Near the ſummit of Lettery-mountain, Ballynahinch, Cunnemara, in the clefts of the rocks, and on the margins of the rills, at the S. E. part of the mountain; not in flower in September.

CI.

THALIC'TRUM mi'nus, *leſſer meadow rue.* H.—H. H.

By no means a common plant in Ireland; found it but ſparingly on Ireland's eye, Howth—beyond the ſheds of Clontarf, on the ſides of the ditch going to the Warren-houſe, before the old ſituation of the Raheny mills. Roſſwood, near Killarney.—In a meadow near Mount Melick.

CII.

RANUN'CULUS parviflo'rus, *ſmall flowered crow-foot.* H.—H. H.

This humble annual crow-foot grows on the eaſt ſide of the Green-hills.—On the ditch-ſide beyond

beyond Milltown, about half a mile, the road to Church Town, on the right hand ſide, county Dublin.—Along the river ſide at Bray.—I have ſeen it ſo early in flower as April.

CIII.

HELLEB'ORUS vir'idis, *green hellebore.*
H.—H. H.—H. M.

We may conſider this ſpecies of hellebore as amongſt the very ſcarce plants, and which was found rather ſparingly, on rocky and copſy paſture ground, at Drummartin near Dundrum, county Dublin, flowering in April. The root is very acrid, purgative, and poſſeſſes highly active principles.

CIV.

SCUTELLA'RIA galericula'ta, *common ſkull-cap.*
H.—A. P.—H. H.

Common in the rivulets in the county Galway, Galway bay, Bilberry iſland, Lough corib among the ſtones on the ſhore, and Renvi ſhore, Cunnamara. In the marſhes at Howth, county Dublin, flowering in September.

CV.

SCUTELLA'RIA mi'nor, *leſs ſkull-cap.*
H.—A. P.—H. H.

Found with the former in Cunnamara, but much more common, and flowering at the ſame time.

TEU'CRIUM

CVI.

TEU'CRIUM Scor'dium, *water germander.*
H.—A. P.—H. H.—H. M.

In a marſhy place, near the river bridge, eaſt of Caſtle Lyons, not in quantity, and flowering late in Auguſt. The powdered leaves have been found to be ſerviceable in worm complaints.

CVII.

TEU'CRIUM Chamœ'drys, *common germander.*
H.—H. H.—H. M.

On the borders of the ſandy fallow fields at the Green-hills, on the road leading to Tallaght county Dublin.*

One of the ingredients in the celebrated gout powder, ſold in London.

CVIII.

MEN'THA Pule'gium, *pennyroyal.*
H.—H. H.—H. M.

It is mentioned as growing on a ſtony ſoil—the church-yard of Ennis furniſhes it in tolerable quantity, flowering in Auguſt. In the marſhy fens about the barony of Iſlands and Bunratty. In Earl Kenmare's park, near Killarney. Children have been much benefited, by taking the juice of

* Cat. Pl. Dublin. 155.

of pennyroyal mixed with ſugar, or honey, in the hooping cough.

CIX.

MEN'THA hirſu'ta, *Eng. Bot.* v. 7. 447.
H.—A. P.—H. H.

Rather common in marſhes, ſides of rivers, and wet places, flowering in Auguſt.

CX.

MEN'THA hirſu'ta. *Fl. Brit. Smith.*
H.—A. P.—H. H.

This, the *Mentha aquatica minor* of Sole, pretty common in watery ſituations.

CXI.

MEN'THA hirſu'ta, var. 2. *Withering.*
H.—A. P.—H. H.

This ſmall round-headed mint, firſt noticed by Ray, Syn. 233. t. 10. f. 1, I have very frequently met with on the ſides of rivulets.

CXII.

MEN'THA hirſu'ta, var. 3. *Fl. Brit. Smith.*
H.—A. P.—H. H.

Abundantly in the marſhes, and ſides of the running ſtreams in the Glynns, Earl Kenmare's park, near Killarney.

When

When I first found this mint, I considered it a new species, but having sent a specimen of it to Doctor Smith, he assures me it is the variety of *Mentha hirsuta* now noticed.

CXIII.

MEN'THA arven'sis, var. β. *Fl. Brit. Smith.*
H.—A. P.—H. H.

The *Mentha præcox* of Sole, in the marshes at Coghreen, near Killarney, flowering in August.

Along the way side between Dundalk and Jonesborough, county Louth, *John White.*

CXIV.

BETO'NICA officina'lis, *wood betony.*
H.—H. H.—H. M.

Very common in the woods at Mucruss, Killarney, flowering in August. Near Abbot's-town, county Dublin. In the wood by the river side at Corronanagh, county Clare. In the woods of Shane's castle, county Antrim. The root, in a small dose, is said to have an emetic quality, and the dried leaves powdered are a good sternutatory.

CXV.

MARRU'BIUM vulga're, *white horehound.*
Irish, *Drafunt, or Orafunt.*
H.—H. H.—H. M.

Common on the waste ground, Murra of Wicklow, flowering about August. The extract of the

the plant is highly valued as a medicine for coughs and asthmas, and I believe deservedly so. The Negro Cæsar's remedy for vegetable poisons is said to contain a large proportion of white horehound.

CXVI.

THY'MUS Serpyl'lum, var. , *Fl. Britann. Smith.*

F.

This very beautiful, and most shrubby variety of mother of thyme, is to be found decorating the rocks of Ross, Killarney, along with the Rubus saxatilis, or stone bramble, flowering in August.

CXVII.

THY'MUS Serpyl'lum, var. 9. *Withering.*

H.—F.—H. H.

This small, hairy, creeping, variety of mother of thyme, with little woolly heads, noticed so long since as the days of Ray, as having been found in Ireland, though the particular habitat is not mentioned,* was found by *John White* on Saddle and Trumpet mountain, county Louth, together with a variety, which had variegated leaves.

LATHRÆA,

* Synopsis, 231.

CXVIII.

LATHRÆ'A ſquama'ria, *greater tooth-wort.*
H.—H. H.

Found in flower early in May, iſſuing from the decayed leaves of hazel trees, and to the root of which ſpecies of tree it ſeemed to be attached, in a very ſhady part of the wood of St. Catharine's, county Dublin.

CXIX.

LIMOSEL'LA aquat'ica, *mudwort.*
A. P.

Frequently occurring where the water has ſtood during the winter, county Galway—near Ballynahinch, Cunnamara.

CXX.

OROBAN'CHE ma'jor, *greater broom-rape.*
H.—H. H.

This ſuppoſed paraſitical plant is to be met with between Luttrel's-town and Lucan, near Woodtown; alſo between Dunleary and Bullock amongſt the rocks, and, as it would appear, adhering to furze; flowering in Auguſt. *Dr. Smith* ſays it has a ſmell like cloves, and a very aſtringent taſte.

BART'SIA

CXXI.

BART'SIA viſco'ſa, *viſcous Bartſia.*

H.—A. P.—H. H.

We may enumerate this ſpecies of Bartſia among the very rare plants.--Gortdonoughmore bog, Cloghroe, near Richardſon's cabin, about ſix miles from Cork, on the public road to Killarney, affords it in tolerable quantity, flowering late in July.

CXXII.

LEPI'DIUM rudera'le, *narrow leaved pepperwort.* H.—H. H.

On the North wall, county Dublin, but not in any quantity, flowering in September. *Doctor Withering* ſays, it ſmells like a fox.

CXXIII.

TURRI'TIS hirſu'ta, *rough tower-muſtard.*

H.—H. H.

This plant by no means common, was found about Finto, on the rocks, flowering in July—and on ſome very old walls near the town of Slane.—Knockmai mountain, Caſtle Hacket, near Tuam.--On walls, Ballymaſcanlon, county Louth, *John White.*

CXXIV.

CARDAMI'NE bellidifo'lia, *daiſy leaved lady's-ſmock.* H.—H. H.

This was found on the rocks, with the former about Finto, county Clare.

CXXV.

SISYM'BRIUM terres'tre, *annual water-rocket.* A. P.—H.—H. H.

On the margins of Curraghha bog, and in ſtagnant pools about Greenoug, county of Dublin ; flowering in June. In the marſhy bogs near Tuam.

CXXVI.

MY'AGRUM ſati'vum, *common gold of pleaſure.* H.—H. H.

On the borders of Lough Corib, near Lemon field, Oughterard, county Galway, in flower in Auguſt, and truly in a wild ſtate. It is ſuppoſed in England, not to be indigenous, but imported, and ſowed with flax from foreign countries. In Germany it is much cultivated, for the purpoſe of obtaining an expreſſed oil from the ſeeds, which is uſed in

in medicine, and for culinary, and economical purposes.

To establish a true generic character for this plant, has excited the ingenuity of some very celebrated botanists.--Gmelin, and Withering following him, place it under a new genus *Mænchia*, and Doctor Smith refers it to the genus *Alyssum*.

CXXVII.

CHEIRAN'THUS sinua'tus, *sea stock*. H.—H. H.

This fine scarce plant was found at high water mark about the sand hills of Dough, county Clare, but sparingly; flowering the latter end of August.

CXXVIII.

ERODI'UM marit'imum, *sea geranium*. H.—H. H.

The *Geranium maritimum* of Hudson, Withering, &c.—On the sandy sea shore at Killeny bay, and the S. E. side of Howth, flowering early in August.—On the sandy shore at Aghris Cunnamara, *Jeff. Cunnis's, Esq.*

CXXIX.

GERA'NIUM Pyrena'icum, *mountain crane's bill*. H.—H. H.

Nothing can be more common than this Geranium, and I notice it only, because some

 particular

particular habitats are annexed to it in the British Floras, as if it were a scarce plant in England. The variety with white flowers is frequently to be met with.

CXXX.

GERA'NIUM lu'cidum, *shining crane's bill.*
H.—H. H.

On argillaceous rubbish, in a shady situation, to the west of Ross island, Killarney, abundantly. On the rocks at Ballycarrol, near Slane, and at the Naul, very near the bridge. Common on the rocks at Cong, county Mayo, flowering so late as September. The whole plant, as remarked by Withering, frequently assumes a purplish red colour like the *G. Robertianum.*

CXXXI.

ALTHÆ'A officina'lis, *marsh mallow.*
H.—H. H.—H. M.

In prodigious plenty, in all the salt marshes about the river Shannon, and Fergus. On the road to Cardiff's-bridge, near Cabragh, county Dublin, flowering very late. In many salt marshes, county Cork, particularly in Cable island, where it was noticed long since by *Smith* in his Civil and Natural History of the county Cork.

Cork. The roots, which are perennial, abound with mucilage, and are much uſed in ſuch caſes as require emollients.

CXXXII.

LAVATE'RA arbo'rea, *ſea tree mallow.*

H.—H. H.

On Ireland's eye, oppoſite Howth; where I have meaſured a plant five feet high. Abundantly on Galway bay. A remarkable circumſtance attends the filaments of this plant, that they are woolly at the baſe.

CXXXIII.

MAL'VA moſcha'ta, *muſk mallow.*

H.—H. H.

Very much reſembles the *M. Alcea*, which is not a native. The borders of the fields along the mail coach road, between Carlow, Kilkenny, and Clonmel, are decorated with the flowers of the muſk mallow, during the month of July. The muſky perfume, which it diffuſes during the warm months, is, as I have experienced, hardly perceiveable in cold, and wet weather. On the public road between Moat and Athlone. Bees are very fond of the flowers of this mallow.

FUMA'RIA

CXXXIV.

FUMA'RIA capreola'ta, *red climbing fumitory.* H.—H. H.

This fumitory, which has been too frequently miſtaken for the common officinal ſpecies, is pretty common in Ireland, particularly in the county of Dublin, flowering very nearly the whole year. It is very ſingular in this ſpecies of fumitory, that the leaves perform the office of tendrils or claſpers, that is, they turn round whatever objects they touch.

CXXXV.

FUMA'RIA clavicula'ta, *white climbing fumitory.* H.—H. H.

Not ſo common with us as the former, but is to be met with in moiſt gravelly ſhady ſituations. On the road leading to the Dublin mountains, under the hedges above Dundrum, above the little Dargle, car road to Kilmaſhoge; and many parts of the county Wicklow; flowering in July and Auguſt. Along the old hedges at Ballinamore, and ſhore banks at Renvi, county Galway.

CXXXVI.

POLYG'ALA vulga'ris, *milkwort* v. ζ *Fl. Ang. Hudson.* H.—H. H.

This very delicate variety of milkwort, with myrtle-ſhaped leaves, is very common in

in marſhy ſituations, county Galway, particularly near Tuam. *Doctor Smith* experienced very good effects from an infuſion of our common milkwort, (which is very bitter) in a catarrhous cough, *Engliſh Botany*, 76.

CXXXVII.

O'ROBUS ſylvat'icus, *bitter vetch.*

H.—H. H.

A very ſcarce vetch, but rather common in ſome of the iſlands on Lough Corib, particularly Bilberry iſland, county Galway, where I found it in September, without flower or legumen. The whole plant has a diſagreeable bitter taſte.

CXXXVIII.

VI'CIA ſylvat'ica, *wood vetch.*

H.—H. H.

In a great ſtate of luxuriance, and abundantly in the woods to the ſouth of Roſs iſland, Killarney, exhibiting its beautifully ſtriped flowers in the month of July.—Roſstrevor wood, county Down, in abundance, *John White.*

I preſume

I presume to think, this is the vetch noticed by *Sherard, R. Synop.* 324, as having been found near Ross-trevor, and not the *Orobus sylvaticus*, as is so generally supposed. It is perhaps one of the most beautiful indigenous climbers we have, both the leaves and flowers displaying much elegance.

CXXXIX.

TRIFO'LIUM arven'se, *hare's foot trefoil.*

H.—H. H.

The barren drifting sands all about Rush, county Dublin, abound with the silky foliage of this trefoil, exhibiting its flowers so late as the month of October. Mr. Dickenson observes, that this trefoil is highly aromatic, when dried, and that it retains its odour long, *Withering*, 636.

CXL.

TRIFO'LIUM sca'brum, *rough trefoil.*

H.—H. H.

In dry sandy fields abounding with calcareous stones, the Sutton side of Howth, flowering so early as May.—Mountainous ground, about Millefont, county Louth, *John White.*

TRIFO'LIUM

CXLI.

TRIFO'LIUM marit'imum, *teasel-headed trefoil.*
H.—H. H.

The *Trifolium stellatum* of Hudson—found in a field near Kilbarrick church-yard, road to Howth, flowering in August.

CXLII.

PRENAN'THES mura'lis, *wall prenanthes.*
H.—H. H.

It is considered by many authors as a rare plant, and Doctor Smith, *Eng. Bot.* v. 7,457, observes that it is sometimes to be met with on a chalky soil, in woods, &c.—As to a chalky soil, I must again repeat it, we have no such in Ireland; but the woods of Collon, county Louth, abound with the Prenanthes muralis.

CXLIII.

HEDYPNO'IS hi'rtum, *deficient dandelion.*
H.—H. H.

The *Leon'todon hirtum* of *Withering.*—At the North wall, common—the roots of this species are bitten off, not tapering as in *H. hispidum, Eng. Bot.* v. 8, 555.

HEDYPNO'IS

CXLIV.

HEDYPNOIS Tarax'aci, *alpine Hedypnois.* H.—H. H.—A. P.

The *Hieracium Taraxaci* of *Withering*, found on the freſh water marſhy ſhore at Inniſfallen iſland, Killarney, flowering in Auguſt, common. My ſpecimens, however, do not exactly correſpond with the figure in *Eng. Bot.* v, 16, 1109, and therefore I notice it with ſome doubt.

CXLV.

HIERA'CIUM ſubau'dum, *ſhrubby leaved hawkweed.* H.—H. H.

This ſpecies of Hieracium, ſometimes miſtaken for *Hiera'cium umbella'tum*, is to be met with in ſhady ſituations, growing among the rocks near the ſhore, ſouth ſide of Roſs, Killarney, and near the cultivated part of the iſland to the left as you enter it, flowering in July.—Sleivnamhady or the Dog's mountain, county Down, *John White;* who likewiſe found in the ſame place *a variety with ſpotted leaves.*

CXLVI.

HIERA'CIUM ſylvat'icum, *wood hawkweed.* H.—H. H.

Was formerly ſuppoſed to be a variety of *H. Murorum*, but from which it differs materially

terially, and is now confidered as a diftinct fpecies, and fcarce plant. Along the river banks, Bryansfort, foot of Mourn mountains, county Down, *John White.*

CXLVII.

CORE'OPSIS Bi'dens.

A. P.— H.—H. H.

This plant, which is confidered by very refpectable authority as a variety of *Bidens cernua*, but to which I cannot affent, is as common as the latter, in watery fituations in the county Galway.—Renvi, Cunnamara—and between Cloghan and Tullamore, in abundance, flowering in September.

CXLVIII.

CAR'DUUS praten'fis, *meadow thiftle.*

H.—H. H.

This thiftle, which I don't confider as a very common fpecies in general, is to be found rather abundantly in the fields, in the county Galway.

CXLIX.

CAR'DUUS tenuifl'orus, *flender flowered thiftle.*

H.—H. H.

Common about Dublin, and in many other parts of Ireland.

SOL IDA'GO

CL.

SOLIDA'GO Cam'brica, *Welſh goldenrod.*
H.—H. H.

In its wild ſtate, it attains to a very few inches in height, but when cultivated to many. Along the banks at Bryansford river, at the foot of the Mourn mountains, county Down, *John White.*

CLI.

ARTEMIS'IA Abſin'thium, *common wormwood.*
H.—H. H.—H. M.

On the lands of Howth, and Bray, particularly by the way ſides, very common.—Abundantly on Buffin iſland, Cunnamara. The immortal *Haller* affirms, that, from a long uſe of wormwood, he has kept himſelf free from gout. The aſhes of wormwood are ſaid to afford a more pure alkaline ſalt, than moſt other vegetables.

CLII.

ARTEMIS'IA marit'ima, *ſea-wormwood.*
H.—H. H.—H. M.

In muddy ſituations, near the coaſt, here and there about Howth. Doctor Withering obſerves, that in its wild ſtate it ſmells like

Marum

Marum, or Camphor, but when cultivated in gardens it is leſs grateful.

CLIII.

GNAPHA'LIUM margarita'ceum, *American cudweed, pearly everlaſting.*

H.—H. H.

Found this ſpecies of everlaſting, completely in a wild ſtate, on the banks of old ditchès, and old mud walls at Cloghreen, Killarney, flowering in Auguſt. I am informed it grows wild near the town of Wexford.

CLIV.

GNAPHA'LIUM ſylvat'icum, *upright cudweed.*

H.—H. H.

On Lettery mountain, and other places about Ballynahinch, Cunnamara, flowering in September. Bears a ſtrong reſemblance to *Gnaphalium rectum.*

CLV.

GNAPHA'LIUM dioi'cum, *mountain cudweed.*

H.—H. H.—A. P.

Common in boggy and mountainous ſituations—abundant on the Burren mountains—Bog of Allen—Dublin mountains, near Kilmaſhogè—near Nenagh—between Moat and Athlone.

EUPAT'ORIUM

CLVI.

EUPAT'ORIUM cannab'inum, var. *folio integro.*
H.—H. H.

The entire leaved variety of hemp agrimony, I found on Bilberry iſland, Lough Corib. Mr. Woodward ſays that this is the ſeedling plant of early flowers the *firſt* year; the *ſecond* year it has *fingered* leaves, as he has frequently obſerved.

CLVII.

INU'LA Hele'nium, *common elecampane.*
H.—H. H.—H. M.

Found at Craggone, near the old bridge, in the barony of Inchiquin, flowering in September, and above four feet high. A decoction of the root is ſaid to cure ſheep, that have the ſcab.

CLVIII.

AN'THEMIS nob'ilis, *common camomile.*
H.—H. H.—H. M.

The open gravelly commons, and high road at Glogen, near Renvi, Cunnamara, furniſh this very uſeful ſtomachic medicine in conſiderable quantity, flowering in September.—At the foot of Tullybranagan mountain, county Down, *John White.*

LOBE'LIA

CLIX.

LOBE'LIA Dortman'na, *water Lobelia.*
A. L.

Abundantly in the lakes about Killarney, on the clear gravelly bottoms, near their edges.—All the loughs in Cunnamara abound with this elegant and ſingular plant, flowering in September. It affords a milky juice.

CLX.

VI'OLA arv'enſis, *Sibthorp.* 84.
H.—H. H.

Very common in the ſandy fields about Ruſh and Howth, flowering ſo late as October.

CLXI.

VI'OLA lu'tea, *yellow mountain panſy.*
H.—H. H.

I ſet down this panſy as a diſtinct ſpecies, yielding to high authority, yet I doubt but it ſhould be conſidered as merely a variety of *Viola tricolor*, or common panſies.

Be this as it may, it is to be met with on the road to Howth, between the Sheds of Clontarf, and the old mill ground of Raheny, about the rabbit-burrow. On the ſandy hills of

Dough

Dough and Ballingaddy, county Clare.—Mr. Afzelius informed Doctor Withering, that this plant was intirely unknown to Linnæus.

CLXII.

VI'OLA cani'na, var. *alpina*, *Hud. Fl. Anglic.*
H.—H. H.

Found this alpine dog's violet of Hudſon on the large ſtones, to the weſt of Lettery mountain, Ballynahinch, Cunnamara.

Slips of white paper, ſtained with the juice of the petals of violet, particularly the ſweet garden violet, and kept from the air, and light, are good chemical teſts to detect an acid or an alkali, the former changing the blue colour to a red, and the latter to a green, *Withering*.

CLXIII.

OR'CHIS latifo'lia, *broad-leaved marſh Orchis.*
H.—H. H.—A. P.

Near Kingſtown at the foot of the Dublin mountains in the very wet meadows.—Long meadows, going to Chapelizod.—Lambay.—On the marſhy fields about a mile beyond Laughlinſtown, to the weſt; and in many other marſhy ſituations in Ireland.

It is highly probable that this, and every other ſpecies of our common Orchis, as well

as

as the *O.mascula*, noticed in the *59th vol. of Phil. Trans.*, may be used indiscriminately for making *salep*, and affording an excellent nutriment in times of scarcity. If plantations should ever be made of this valuable restorative, the plants must be propogated by their roots; as Doctor Percival of England frequently attempted to propagate them by apparently perfect seeds, but they would not vegetate; and it is somewhat singular that the seeds of all the true *Orchideæ* have never hitherto been known to vegetate.

CLXIV.

SATY'RIUM hirci'num, *lizard Satyrium, or Orchis.* H.—H. H.

This very rare, and tall orchis is to be met with in very shady situations among shrubs; producing abundant flowers in the beginning of August, in the Barrony of Tullagh, county Clare. The flowers are said to smell like a goat, hence, I suppose, the trivial name.

CLXV.

SATY'RIUM viride, *frog Satyrium, or Orchis.* H.—H. H.

In a gravelly soil; a single plant growing here and there, and distant from one another,

near the three-rock mountain, county Wicklow; flowering in June.—Moiſt meadows along the river ſide, Tinure, county Louth, *John White.* Doctor Stokes of England moiſtened the *Antheræ* with water, but which appeared to remain unchanged by the application, and did not ſeem to contain any viſible pollen.

CLXVI.

SATY'RIUM al'bidum, *white Satyrium.*
H.—H. H.

On the high expoſed grounds, near that beautiful and romantic ſpot in the county Wicklow, called Luggylaw, this delicate and remarkably ſtraight ſatyrion is to be ſeen in no inconſiderable quantity, flowering about the middle of June; likewiſe near the three-rock mountain, ſame county.

CLXVII.

O'PHRYS Nidus a'vis, *bird's neſt Ophrys.*
H.—H. H.

In the thickets, among the rotten leaves, Luttrel's-town wood, county Dublin, flowering ſo early as April. It very much reſembles an *Orobanche*, the whole plant being brown.

O'PHRYS

CLXVIII.

O'PHRYS corda'ta, *heart-leaved mountain Ophrys, or twayblade.* A. P.

The turfy marſhes at Loughbray, near the new military road, afford this very ſmall Ophrys in tolerable quantity; and from its diminutive ſtature, and attachment to ſhady ſpots, it might be frequently overlooked.

CLXIX.

O'PHRYS mu'ſcifera, *fly Ophrys.* H.—H. H.

Between the Deer-park wall, and Finglaſs river, county Dublin, in the paſtures frequently; and more rare between Rathfarnham and Kilgobbin mountain, ſame county; flowering in July.

CLXX.

O'PHRYS a'pifera, *bee Ophrys, or bee flower.* H.—H. H.

Abundantly on the clayey grounds about Youghall. In the midway between Stockoole and St. Doulagh's, on the left hand, between the path and the ditch, county Dublin; and many other places in Ireland; flowering in June.

CLXXI.

SERA'PIAS latifo'lia, *broad leaved common helleborine.* H.—H. H.

In the fiſſures of the rocks, and the ſhady hedges in the woods at Roſs, Killarney, flowering in Auguſt.

CLXXII.

SERA'PIAS palu'ſtris, *marſh helleborine.* A. P.

Fenny meadows at the foot of the Dublin mountains, particularly near Stag's-town, and King's-town; and many other places in Ireland; flowering late in the ſeaſon.

CLXXIII.

CHA'RA flex'ilis, *ſmooth Chara.* A. P.

In the marſhy ditches, near the ſhore of Lough Corib, Lemon-field, and the ſalt water, dirty ditches, near Ballynahinch, Cunnamara.

CLXXIV.

CHA'RA hiſpida, *prickly Chara.* A. P.

The clayey dirty ditches near Ballynamore-bridge, county Galway, afford it in abundance.

dance. This ſpecies, as well as the *Chara vulgaris*, when freſh is very fetid.

CLXXV.

LEM'NA triſul'ca, *ivy leaved duck's meat.* A. P.

In the bog of Curragha, county Dublin.—Stagnant waters, near Tuam.

CLXXVI.

SPARGA'NIUM na'tans, *floating burr-reed, Linnæi.* A. L.

The true *Sparganium natans* I found in ſtagnant pools, or rather turf holes, and not very abundant, in Ballyphahane bog, near Cork, flowering in July. Many places in Cunnamara. The leaves appeared on the ſurface of the pools, like thoſe of aquatic graſſes.

CLXXVII.

CAR'EX dioi'ca, *ſmall ſeg.* A. P.

Frequently to be met with in boggy ſituations, flowering in June.

CLXXVIII

CA'REX pulica'ris, *flea ſeg.* H.—H. H.

At the foot of Mangerton mountain, Killarney.—Lettery hill, Ballynahinch, Cunnamara,

mara.—At Howth, county Dublin in the muddy, turfy bottom grounds; flowering in July.

CLXXIX.

CA'REX ſtellula'ta, *little prickly ſeg.*

A. P.

Rather common in marſhy barren grounds--on the ſides of the wet ditches, Curragha bog, county Dublin, flowering in June. *Haller* juſtly obſerves, that this Carex is diſtinguiſhed from *C. muricata* by having the point of the capſule acute, and not cloven.

CLXXX.

CA'REX cur'ta, *white ſeg.*

A. P.

The *Carex brizoides* of Hudſon—in ſmall quantities, in the marſhes at the foot of Mangerton mountain, Killarney.—Lettery hill, Cunnamara.—Curragha bog, county Dublin; flowering in Auguſt.

CLXXXI.

CA'REX ova'lis, *naked, or oval ſpiked ſeg.*

A. P.

The *Carex Leporina* of *Hudſon*—common in marſhes and wet paſtures, at Howth, and Curragha bog, county Dublin, flowering in July.

CA'REX

CLXXXII.

CA'REX remo'ta, *remote ſeg.*

A. P.

As common as the former; in the moiſt parts of the woods of Santry, Luttrel's-town, Bracken's-town, and the ſides of marſhes at Howth, county Dublin; flowering in July.

CLXXXIII.

CA'REX arena'ria, *ſea ſeg.*

H.—H. H.

Pretty common on the drifting ſand, near the ſea ſhore at Howth, and on Ireland's-Eye; flowering in July.

CLXXXIV.

CA'REX interme'dia, *ſoft ſeg.*

A. P.

The *Carex diſticha* of Hudſon—in the bog of Curragha, and the marſhy ground in Santry wood, county Dublin; flowering in July—much reſembles *C. ovalis.*

CA'REX

CLXXXV.

CA'REX divi'ſa, *marſh ſeg.*
H.—H. H.—A. P.

Salt water marſhes at Aghris and Renvi, Cunnamara; and in the bog of Curragha, flowering in Auguſt.

CLXXXVI.

CA'REX murica'ta, *ſpiked ſeg.*
A. P.

Banks of watery ſpots in a ſhady ſituation, Curragha, county Dublin.

CLXXXVII.

CA'REX vulpi'na, *great ſeg.*
A. P.

Is amongſt the largeſt ſpecies of Carex, and I believe not very common. In the marſhes at Howth, and ſeveral other places, county Dublin; flowering in May.

CLXXXVIII.

CA'REX panicula'ta, *panicled ſeg.*
A. P.

Bog of Curragha, in the ſhady watery ſpots, flowering in July.

CA'REX

CLXXXIX.

CA'REX pen'dula, *pendulous ſeg.*
A. P.

In the moiſt parts of Santry, and Bracken's-town woods, and to the N. eaſt of the hill of Howth, flowering in June. The ſize of this Carex, being ſometimes three, and four feet hight, and its long hanging ſpikes, are appearances which make it eaſily aſcertained.

CXC.

CA'REX ſtrigo'ſa, *looſe pendulous ſeg.*
H.—H. H.

Very ſimilar to *Carex ſylvatica*, and more common than ſuppoſed in the hedges of woods in Ireland. At the old Dargle, county Wicklow, and Luttrel's-town wood, county Dublin, rather common; likewiſe at Curragha, flowering in June.

CXCI.

CA'REX præ'cox, *early flowering ſeg.*
A. P.

In the bog of Curragha, and many mooriſh heaths, flowering in May.

CA'REX

CXCII.

CA'REX fla'va, *yellow ſeg, marſh hedgehog graſs.*
A. P.

Common in marſhy ſituations; flowering in June, at Howth.

CXCIII.

CA'REX dis'tans, *looſe ſeg.*
H.—H. H.—A. P.

Near the top of Mangerton mountain, Killarney.—In the marſhes to the S. W. of Howth, and on Ireland's-eye, flowering in July.

CXCIV.

CA'REX ſylva'tica, *wood ſeg.*
H.—H. H.

Very ſimilar as I obſerved before to *Carex ſtrigoſa*—common in woods.

CXCV.

CA'REX recur'va, *heath ſeg.*
H.—H. H.

At Howth in the heathy moiſt paſtures, Sutton ſide, flowering in July, and on Ireland's-eye.

CA'REX

CXCVI.

CA'REX pallef'cens, *pale ſeg.*
A. P.

Curragha bog, flowering in July.

CXCVII.

CA'REX limo'ſa, *brown ſeg*
A. P.

The *Carex elegans* of *Wildenow*—with the former, and in many other boggy ſituations, flowering in July.

CXCVIII.

CA'REX pſeudo-cype'rus, *baſtard cypress ſeg.*
H.—H. H.

Not very uncommon in wet woods; as at the old Dargle, county Wicklow—Bracken's-town wood, county Dublin, &c.—likewiſe at Curragha.

CXCIX.

CA'REX piluli'fera, *round-headed ſeg.*
H.—H. H.

Moiſt heaths, and paſtures, Howth, flowering early.

CA'REX

CC.

CA'REX cæſpito'ſa, *turfy ſeg.*

A. P.

Has many particulars common with *Carex ſtricta;* and I confeſs, only that the laſt flowers much earlier, I ſhould take them to be the ſame—rather common in marſhes, as at Howth, &c., flowering in June.

CCI.

CA'REX ſtri'cta, *glaucous ſtraight-leaved ſeg.*

A. P.

Bears a ſtrong reſemblance to the former; but is much larger, and flowers much earlier; ſo early, as the latter end of April. Found in the bog of Curragha.

CCII.

CA'REX ripa'ria, *great ſeg.*

A. L. F.

The *C. acuta* var. *α.* Hudſon. Very common on the edges of rivers, and watery ſituations; flowering in June.

CA'REX

CCIII.

CA'REX acu'ta, *ſlender-ſpiked ſeg.*
A. L. F.

As common as the former, and in ſimilar ſituations.

CCIV.

CA'REX paludo'ſa, *leſſer common ſeg.*
A. L. F.

With the two former very frequently; flowering in July, or late in June.

CCV.

CA'REX veſica'ria, *bladder ſeg.*
A. P.

In the bog of Curragha; flowering in June. The Reverend Doctor Goodenough, whoſe very ingenious and ſcientific paper in vol. II. of the Linnæan Tranſactions, has thrown a new light on the genus *Carex*, by its giving an elegant and inſtructive ſynoptical view of this very difficult tribe, obſerves that the *Carex veſicaria* is eaſily diſtinguiſhed, by its yellow hue, narrow ſhort ſcales, and inflated ſmooth conic capſules.

CA'REX

CCVI.

CA'REX hir'ta, *hairy ſeg.*
H.—H. H.

Not uncommon in wet meadows, and marſhy places, flowering in July, at Howth.

CCVII.

CA'REX pani'cea, *pinky ſeg.*
H.—H. H.

In the wet meadows, and paſtures, Scrible's-town, and at Howth, county Dublin; flowering about July. It is very ſingular that this is the only ſpecies of *Carex*, whoſe capſules are ſo commonly ſubject to be blighted.

CCVIII.

CA'REX ri'gida, *hard ſeg.*
H.—H. H.

This ſcarce Carex is to met with on Bulben, Ennis Owen, flowering in June, Mr. *Browne.*

CCIX.

ERIOCAU'LON ſeptangula're, *jointed pipe-wort.*
A. L. F.

The loughs, and waters both running, and ſtagnant, ſo common in Cunnamara, abound with

with this very rare and ſingular plant, which has never been ſeen before, but in the iſle of Skye;* and I have the firſt botanic authority of the preſent day for ſaying, that the *Eriocau'lon decangula're* of Linnæus is an American ſpecies, and very diſtinct from this.

The number of angles on the culmus of our Eriocaulon varies from ſix to ten, but ſeven angles appear to me to be the moſt frequent.

It is obſerved that the root is ſlightly acrimonious when chewed.

CCX.

LITTOREL'LA lacuſ'tris, *plantain ſhore-weed.*
A. P.

Very common in the ſandy marſhy ſpots, near Ballynahinch, Cunnamara, and many other parts of the county Galway, flowering in September. Lough Shane, Mourn mountains, county Down, *John White.*

CCXI.

SAGITTA'RIA ſagittifo'lia, *common arrow-head.*
A. L. F.

This beautiful aquatic is to be met with in many parts of the river Shannon, above and below,

* Eng. Bot. v. XI. 733.

below, Lanesborough, county Longford, flowering in August. The bulb at the lower part of the root constitutes a considerable part of the food of the Chinese, and on that account they cultivate it.

CCXII.

CERATOPHYL'LUM demer'sum, *common horn-wort.* A. L. F.

In stagnant pools, and slow streams, common in Cunnamara; particularly near Ballynahinch.

CCXIII.

CERATOPHYL'LUM submer'sum, *unarmed horn-wort.* A. L. F.

With the former, but not so common.

CCXIV.

SA'LIX fus'ca, *brown willow.*

F.

Common on the turfy, and heathy mountains, Cunnamara.

CCXV.

SA'LIX depress'a, *Hoffman?*

F.

I found this with the former; *silvery on both sides of the leaf.*

SA'LIX

CCXVI.

SA'LIX monan'dra, *purple willow.*

A.

On the ſides of rivers, Cunnamara,

CCXVII.

SA'LIX ci'nerea, *ſallow willow.*

A.

In hedges, wet ſituations, Cunnamara—and many other places in Ireland. The bark has been made into coarſe paper, and paſte board, *Withering.*

CCXVIII.

SA'LIX herba'cea, *herbaceous willow.*

F.

This willow improperly called herbaceous, but the ſmalleſt ſhrub perhaps yet known, and I may add one of the moſt ſcarce of all the Britiſh willows, *ſalix retuſa* only excepted, is pretty common on the top of Mangerton mountain, by the ſteep ſide of the horſe pool, or Poulna coppel; and on Bulben mountain, Ennis-Owen.—Clefts of Scallerea rocks, W. of Bencom mountain, the Cairns rocks, and Slievnamhady or the dog's mountain, county Down, *John White.*

CCXIX.

EM'PETRUM ni'grum, *black crake, or crowberry.* F.

Common on the mountains in Ireland. Near Killarney on Mangerton, Turc, and Purple mountains. On the mountainous heaths, Cunnamara, nay on Buffin iſland Cunnamara coaſt, and many other parts of the county Galway.

CCXX.

VIS'CUM al'bum, *white miſſeltoe, miſſel.* F.

Though common in many parts of England, of very rare occurrence in Ireland. This very ſingular paraſitical ever green ſhrub, grows on an old apple tree in the phyſician's garden of the Old man's hoſpital Kilmainham, and for ſome years back was not known to produce flowers or berries. By what I could learn the apple-tree, on which it grows, was brought from England. Birdlime is frequently made from the berries and bark. Miſſeltoe never takes root in the earth. Mr. Holefear obſerves that ſheep eat it greedily, and that it prevents them from having the rot. The berries when ripe, rubbed on the viſcid ſmooth bark of almoſt any tree, will adhere and produce miſſeltoe the following winter, according

cording to Doctor Hunter, in his editions of Evelyn's Sylva.

CCXXI.

HU'MULUS Lu'pulus, *hops.*

H.—P.—H. H.—H. T.

The hop, which probably is not indigenous, was found in an apparently wild ſtate near Birr, county Tipperary; and on two very old walls at the weſt end of the town of Carroſin, county Clare. Strong cloth is made from the ſtalks of hops in Sweden; and the whole plant is ſaid to dye wool yellow.

CCXXII.

RHODE'OLA Ro'ſea, *roſe-wort.*

P.—H.—H. H.

Found on Mangerton mountain, Killarney, on the rocky ſteep ſides of the horſe pool, or Poulna Coppel, along with the Salix herbacea—the dried root ſmells like a roſe.

CCXXIII.

HYDRO'CHARIS Morſus ra'næ, *frog bit.*

A. P.

Common in the bog of Curragha. In the turfy ditches, about Ballynahinch, Cunnamara.

CCXXIV.

TAX'US bacca'ta, *common yew tree.*

A.

Many very fine old large trees of yew are to be ſeen in the mountainous woods of Glanquin, Burren; and it appears that many were cut down, near a century paſt. Some very fine pieces of cabinet work made of the beautiful wood of this tree, ſome time back, are to this day preſerved by ſome of the old inhabitants. The leaves of yew are highly poiſonous.

CCXXV.

JU'NIPERUS commu'nis, *common juniper.*

F.

This evergreen ſhrub, ſo very various in its growth, is to be found on the ſides of the Cunnamara mountains frequently, in its decumbent, or proſtrate ſtate. About the lakes of Killarney, particularly on a rock called Juniper iſland, near Mucruſs. Many of the mountains of Mourn, *John White.*

Garnett in his Tour ſays, that a ſhip-load of the berries uſed annually to be ſent from Inverneſs to Holland. Gum Sandarach, or Pounce, is the produce of the Juniper tree.

A'TRIPLEX

CCXXVI.

A'TRIPLEX littora'lis, *grafs-leaved fea orache.*
H.—H. H.

In a muddy foil at the S. W. fide of Howth, flowering in Auguft.

CCXXVII.

A'TRIPLEX lacinia'ta, *ferrated fea orache.*
H.—H. H.

In the fame fituation with the former, but more on the beach; flowering early in Auguft.

CCXXVIII.

A'TRIPLEX peduncula'ta, *pedunculated orache.*
H.—H. H.

The falt water muddy marfhes, Cufhtrower bay, near Ballynahinch, Cunnamara, afford it but fparingly.

CCXXIX.

A'TRIPLEX portulacoi'des, *fea purflane.*
F.

Readily diftinguifhed from the former, being fhrubby, the former herbaceous; when both are young, they are very fimilar in foliage.

At

At Howth, on the muddy clayey part of the ſea ſhore, Sutton ſide; flowering late in the ſummer.

CCXXX.

OPHIOGLOS'SUM vulga'tum, *adder's tongue.* C.

By no means rare in marſhy meadows, and paſtures among the ſhort fine graſs; flowering in July. Scrible's-town, near the old orchard to the eaſt—Billaly hill, and alſo on the mountain ſide from Wood-town to Stack's-town, Dublin mountains. Moiſt meadows along the river ſide, Tinure, county Louth, *John White.* Mr. Woodward very juſtly remarks, that this fern ſo exactly reſembles the *Oſmunda Lunaria* in habit and ſtructure, that they ought by no means to be ſeparated.

CCXXXI.

OSMUN'DA rega'lis, *Oſmund Royal, or flowering fern.* C.

This beautiful ſpecies of flowering fern is very common in ſome of our ſpungy bogs.—Counties of Cork, Kerry, Galway, Roſcommon, &c.; flowering in September. Dr. Stokes of England obſerves, that impreſſions of this fern are frequently obſerved in the nodules of iron ſtone

ſtone in Coalbrook-dale iron works, and that it is the only ſpecies of an indigenous vegetable, which he has ever ſeen in a foſſil ſtate. All the other impreſſions of ferns, which he has ſeen on iron ſtone, ſeem to be thoſe of American growth, and this very ſpecies of fern is alſo a native of Virginia.

The root of this fern boiled in water is very ſtrong, and is uſed in the North of Europe to ſtiffen linen inſtead of ſtarch, *Withering*.

CCXXXII.

OSMUN'DA Spi'cant, *rough ſpleen-wort.*

C.

In Engiſh Bot. v. 17,1159 it occurs under the name of *Blechnum boreale*, for reaſons which the author ſtates—far more common than the former, in ſtony heathy ſituations, and flowering about the ſame time.

CCXXXIII.

OSMUN'DA Luna'ria, *moon-wort.*

C.

Called ſo from the ſhape of its leaves, is rather a ſcarce plant, growing in moiſt and dry paſtures, and flowering about the latter end of July. At Luggylaw, county Wicklow, and on the Dublin mountains with the Ophioglossum vulgatum, but not in any quantity.

tity. About Rathfarnham and Templeogue, county Dublin.—On the ſides of the hills of Carrickmagoagh, Collon, county Lowth, *John White.*

CCXXXIV.

OSMUN'DA criſpa, *curled Oſmunda, or ſtone fern.* C.

The Pteris criſpa of Eng. Bot. v. 17, 1160; but whether the genus *Oſmunda* or *Pteris*, I will not here determine; for the preſent I retain the old generic name, as I conceive this fern is beſt known by it. On ſome of the very old walls about Rathfarnham, and on a large ſtone, or rather rock, as you enter the village of Dalkey, ſouth ſide, county Dublin.—On the mountains, about Ballynahinch, Cunnamara.

CCXXXV.

ASPLE'NIUM Ce'teraçh, *common ſpleenwort.* C.

Scolopendrium Ceterach Eng. Bot. v. 18, 1244. I do not conſider this as a common plant, tho' in certain ſituations it is to be met with in ſome quantity; as on the old walls about Bullock, near the Forreſt, Broomfield near Lucan, and ſome other places, county Dublin. Many places, county Galway; flowering very late.

ASPLE'NIUM

CCXXXVI.

ASPLE'NIUM Tricho'manes, *common maiden hair.* C.

On the old orchard walls, Scrible's-town, and Broomfield near Lucan, county Dublin.—Pretty common on the ſhady rocks, counties of Cork, Kerry, Galway, &c. flowering late. It has been too frequently uſed as a ſubſtitute for the true maiden hair, *Adiantum Capillus Veneris.*

CCXXXVII.

ASPL'ENIUM Adian'tum ni'grum. *black ſpleen-wort, or maiden hair.* C.

Pretty common in the woods about Killarney; flowering in Auguſt. I met with it, but ſparingly, in Cunnamara.—The mountains of Mourne, *John White.*

CCXXXVIII.

ASPLE'NIUM mari'num, *ſea fern, or ſpleenwort.* C.

Grows in tufts out of the crevices of the rocks abundantly at the ſouth ſide of Howth, near where paſſengers are landed from the packet

packet in bad weather, in a kind of cave, which is liable to be paſſed by. On the cliffs at, and about Dunleary. Abundantly on Buffin iſland, coaſt of Cunnamara.

CCXXXIX.

POLYO'DIUM Phego'pteris, *ſoft pale-ſtalked polypody.* C.

Amongſt the rocks on Carlingford mountain, in the moſt ſhady part of the mountain.

CCXL.

POLYPO'DIUM Dryo'pteris, *three-branched polypody.* C.

Found in the ſtony parts of Turc mountain, Killarney; and amongſt the rocks at the fall of Mam Turc, Cunnamara, Joyce country ſide.

CCXLI.

POLYPO'DIUM aculea'tum, *prickly polypody.* C.

In woods, and ſhady ſituations in many parts of Ireland.—Bracken's-town wood, and Santry wood, county Dublin.

POLYPO'DIUM

CCXLII.

POLYPO'DIUM crista'tum, *crested polypody.* C.

On the sides of Glynbarrow, Sliebloom mountains.

CCXLIII.

POLYPO'DIUM fra'gile, *fine leaved brittle polypody.* C.

Dry rocky mountainous situations in the county Galway, Kerry, and Wicklow.—On the Dublin mountains, very near Tallaght hill.

CCXLIV.

POLYPO'DIUM fra'grans, *sweet polypody.* C.

Having pulled some specimens of this polypodium from the fissures of the humid rocks in Earl Kenmare's park Killarney, and mistaking it for *Polypodium Oreopteris*, or *Thelypteris;* I was somewhat surprised at the very agreeable odour which it emitted, similar to that of our common Anthoxanthum odoratum, sweet smelling spring grass, or the Siberian Holcus odoratus—this circumstance led me to a closer examination sometime afterwards,

afterwards, and I may now almoſt venture to pronounce its being the true P. fragrans of Linnæus, *ſp. pl.* 1550 *foliolis confertis obtuſis ſerratis*, as noticed by Hudſon, *Fl. Ang. ed. alt.* 457. I am free to acknowledge however, that the figure of Polypodium fragrans, as noticed by Desfontaines in his Flora Atlantica, does not correſpond with my ſpecimens.

CCXLV.

ADIAN'TUM Capil'lus-ve'neris, *true maiden hair.*

C.

Patrick Bride, Eſq. a member of the Dublin Society, was ſo obliging as to procure for me ſome beautiful ſpecimens of this ſcarce plant from the ſouth iſlands of Arran, Cunnamara coaſt of Galway, and from further information I can now ſafely ſtate, that it grows in thoſe iſlands in great abundance. This is the plant, which gave name to the ſyrup called *Capillare*, but I may venture to aſſert that it never has any of this plant in its compoſition, being uſually made with ſugar and water only, and ſometimes with the addition of a little orange flower water.

TRICHO'MANES

CCXLVI.

TRICHO'MANES Tunbri'dgenſe, *Tunbridge goldilocks.* C.

This the *Hymenophyllum Tunbridgenſe* of Engliſh Botany, is to be met with amongſt moſs, on moiſt rocks to the ſouth of Turc bridge, Killarney and in the Glynn, Earl Kenmare's park, and many other places in Ireland.

CCXLVII.

ISOE'TIS lacus'tris, *quill-wort.* A. L.

Found under the water about the margins of upper Loughbray, county Wicklow. In many of the Loughs, Cunnamara.

CCXLVIII.

PILULA'RIA globuli'fera, *pill-wort, pepper moſs, pepper graſs.* A. P.

In a ſandy boggy ſituation near the ſalmon-leap, Ballynahinch, Cunnamara, a ſpot which appeared to be ſubject to inundation; flowering in Auguſt.

LYCOP'ODIUM

CCXLIX.

LYCOPO'DIUM clava'tum, *common club moſs.*

C.

Common on mountainous ſituations in many parts of Ireland. It is ſaid to reſtore ropy wine in a few days.

CCL.

LYCOPO'DIUM Salaginoi'des, *prickly, or ciliated club moſs.* A. P.

In a boggy ſpot, by the ſide of a ſtream of water near Derry. At Howth. Mam Turc mountain, Cunnamara.

CCLI.

LYCOPO'DIUM Sela'go, *ſir club moſs.*

C.

Found on Mangerton and Purple mountains Killarney, pretty common among the heaths.— Mountains in Galway common.

CCLII.

LYCO'PODIUM alpi'num, *alpine club moſs.*

C.

Common on ſeveral high mountains in Ireland.

SPHAGNUM

CCLIII.

SPHAG'NUM palus'tre, *grey bog moſs.*

A. P.

The three varieties of this moſs are common in our bogs; the ſecond variety of *Withering* the moſt ſcarce; flowering late in Auguſt.

CCLIV.

SPHAG'NUM alpi'num, *alpine bog moſs.*

A. P.

In boggy marſhy ground at the back of Stream's-town houſe, Cunnamara, with ripe capſules in September.

CCLV.

PHAS'CUM ſubula'tum, *awl-leaved earth moſs.*

C.

On banks of ſandy moſſy ditches not uncommon; flowering early in September.

CCLVI.

PHAS'CUM curvicol'lum, *crooked Phaſcum.*

C.

Found in a barren graſſy ſpot at the foot of Lettery hill, Ballynahinch, Cunnamara, with

with its ripe capſules in Auguſt. Both this and the former are ſo very minute, that they may be frequently paſſed by unnoticed.

CCLVII.

FONTINA'LIS antipyre'tica, *greater water moſs.*

A. L. F.

Luckily found it in fructification floating with the ſtream in a rivulet to the ſouth of Turc, Killarney—without fructification, it is not very uncommon.

CCLVIII.

FONTINA'LIS ſquamo'ſa, *ſcaly water moſs.*

A. L. F.

In rivulets to the north of Mangerton mountain, Killarney, in fructification the beginning of September. Mam Turc mountain, Cunnamara, not in flower in Auguſt.

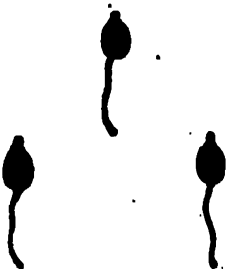
CCLIX.

FONTINA'LIS ſecun'da, *tree Fontinalis.*

C.

Very frequently on trees in orchards.—On trees near Kilcock; flowering very late in the ſeaſon.

FONTINA'LIS



Buxbaumia aphylla.

CCLX.

FONTINA'LIS alpi'na, *alpine water moſs.*

C.

Found on ſtones on the ſide of the Liffey, near Leixlip; in fructification the latter end of July.

CCLXI.

BUXBAU'MIA folio'ſa, *leafy Buxbaumia.*

C.

This very rare moſs, the *Phaſcum montanum* of Hudſon, was found upon the rocks covered with ſcarcely any earth, on the north ſide of Purple mountain, Killarney.—On Mam Turc, Cunnamara—and at the Waterfall, county Wicklow. Both above and below the Waterfall, *Doctor Stokes.*

CCLXII.

BUXBAU'MIA aphyl'la, *leafleſs Buxbaumia.*

C.

As I have never ſeen the Buxbaumia aphylla noticed in any Britiſh Flora, or catalogue, I may venture to ſet myſelf down as the firſt diſcoverer of it in the Britiſh iſlands; and I muſt confeſs, were it not for the excellent deſcrip-

tion, and accurate figure given of it in the Hiſtoria Muſcorum of Dillenius p. 477. t. 68. f. 3. A. B. C. D. E., which by chance I was looking over, I muſt have remained ignorant of its true name to this day—Dillenius calls it *muſhroom-headed moſs*, a name in ſome meaſure applicable—even with this authority, I put it into my cryptogamic herbarium with a mark of doubt? Which was ſome time afterwards removed by Mr. Brown, a very excellent and moſt accurate botaniſt; and who, I underſtand, is now engaged in a voyage of diſcovery—he aſſured me, it was the true Buxbaumia aphylla. If I miſtake not, I gave this gentleman ſome ſpecimens for *Mr. Dixon*, of Covent Garden, London.

On decayed leaves impacted with earth, in a ſhady ſituation to the ſouth of Purple mountain, Killarney, in its capſular ſtate in July.*

SPLACH'NUM

* A little work now lies before me on Iriſh moſſes, *Muſcologiæ Hibernicæ Spicilegium*, juſt publiſhed by a Mr. Turner of Yarmouth; and who, I underſtand, ſpent a few weeks in Ireland.—He notices the Buxbaumia aphylla as having been found by D. Wade on rocks near Killarney.—If I am the perſon alluded to by this gentleman, I conſider myſelf highly flattered; by his very polite anticipationary attention.

CCLXIII.

SPLAC*H*'NUM mnioi'des, *brown tapering Splachnum.* C.

On Mam Turc, Cunnamara, on the dung of animals, very near the ſummit of the mountain; in fructification early in September.

CCLXIV.

POLY'TRICHUM commu'ne, *common Polytrichum.* C.—A. P.

The three varieties of Withering, common in Ireland; in woods, heaths, and boggy ſituations.

CCLXV.

POLY'TRICHUM alpi'num, *alpine Polytrichum.* C.

On Mangerton, Carlingford, Mam Turc, and many other mountains in Ireland; in its capſular ſtate, July and September.

CCLXVI.

POLY'TRICHUM urni'gerum,

C.—A. P.

On the road ſides in boggy ground between Oughterard and the Receſs, Cunnamara; and between Ballinaſloe, and Shannon bridge; with ripe capſules in September.

CCLXVII.

POLY'TRICHUM aloi'des, *dwarf Polytrichum.*

C.

The *Polytrichum nanum of Hudſon.*—In a muddy ſoil, Roſs iſland, and near Turc bridge, Killarney; in the laſt ſituation with *Lichen fragilis*—the capſules in the former, and the ſaucers filled with black powder in the latter, perfectly formed in Auguſt.

CCLXVIII.

MNI'UM glau'cum, *glaucous Mnium.*

C.

This, the *Dicranum glaucum* of *Hedwig*, was found with ripe capſules in the month of Auguſt, on the ſouth ſide of Purple mountain, Killarney;

Killarney; and which, at the time I picked it up, I took to be a variety of *Sphagnum paluſtre.*

CCLXIX.

MNI'UM pſeudo-tri'quetrum.

C.—A. P.

Found on the edges of turf pits in Curragha bog, county Dublin, with ripe capſules in April; and by the margins of rivulets with *Saxifraga ſtellaris*, near the ſummit of Mangerton, Killarney, with ripe capſules in Auguſt. A turf pit, within about half a mile of Aghris houſe Cunnamara, near the ſea ſide.

CCLXX.

BRY'UM acu'tum, *acute Bryum.*

C.

On the ſides of Lettery-hill, Ballynahinch, Cunnamara; with ripe capſules in September.

CCLXXI.

BRY'UM latera'le, *lateral Bryum.*

C.

This the *Bartramia Halleriana* of *Hedwig*, and which I conſider as a very ſcarce moſs, was found with ripe capſules in the month of

of Auguſt, near the top of Purple mountain, Killarney, in a ſtony ſhady ſpot, in very ſmall quantities.

CCLXXII.

BRY'UM criſ'pum, *ſtriated Bryum.*

C.

This, the *Orthotrichum criſpum* of *Hedwig*, is common on trunks of trees in Ireland. I never could detect it in its capſular ſtate.

CCLXXIII.

BRY'UM flex'uoſum, *waved Bryum.*

C.

Grows in abundance on the N. W. ſide of Cullinagh mountain, Queen's county. For this information I am obliged to Mr. Bradbury.

CCLXXIV.

BRY'UM capill'aceum, *ſummer Bryum.*

C.

Grows plentifully in the neighbourhood of Dunrea fort, Ennis Owen. It is the *Swartia capillacea* of *Hedwig*.

HYP'NUM

CCLXXV.

HYP'NUM ſtramineum, *ſtraw-coloured Hypnum.*

C.—A. P.

In a marſhy ſituation, at Clopoſk, near Stradbally, Queen's county, *Mr. Bradbury.*

CCLXXVI.

HYP'NUM lo'reum, *ſpreading Hypnum.*

C.

On Lettery hill, Ballynahinch, Cunnamara; in a ſhady ſpot near the top of the mountain, with ripe capſules in September.

CCLXXVII.

HYP'NUM compres'ſum, *compreſſed Hypnum.*

C.

This, the *Hypnum molluſcum* of *Hedwig*, was found on an old tree to the eaſt of Santry wood, county Dublin, with ripe capſules in May. Bears a ſtrong reſemblance to our common *Hypnum filicinum.*

HYP'NUM

CCLXXVIII.

HYP'NUM attenua'tum, *ſlender Hypnum.*

C.

The *Leſkea attenuata* of *Hedwig*; found on the trunks of old Beech trees, to the north of Innisfallen, Killarney.

CCLXXIX.

HYP'NUM cuſpida'tum, *pointed Hypnum.*

C.—A. P.

Found with ripe capſules in the month of June, in the moiſt parts of the woods of Santry, and Luttrel's-town, county of Dublin.

CCLXXX.

HYP'NUM ſciuroi'des, *creeping Hypnum.*

C.

Creeping and fixed on old trees in a wood, near Laughlin's-town, county Dublin.

HYP'NUM

CCLXXXI.

HYP'NUM ſylva'ticum, *wood Hypnum.*

C.

On ſome old ſtumps of trees in the wood of St. Catharine's, county Dublin; with ripe capſules in June.

CCLXXXII.

HYP'NUM abie'tinum, *fir Hypnum.*

C.

On Lettery mountain, Cunnamara, in September, with not the leaſt veſtige of fructification. The leaves, being perfectly ſtraight, diſtinguiſh it from the common *H. filicinum.*

CCLXXXIII.

HYP'NUM intrica'tum, *matted Hypnum.*

C.

The very excellent figure, given of this ſcarce moſs in the third volume of Engliſh Botany, p. 202, has enabled me to aſcertain it with certainty; and which I found in the woods of Mucruſs, Killarney, with ripe capſules in Auguſt.

HYP'NUM

CCLXXXIV.

HYP'NUM viticulo'ſum, *cylindrical Hypnum.*

C.

Found in ſtony ſituations about the roots of trees in the woods at Shane's caſtle, county Antrim; with ripe capſules the latter end of May.

CCLXXXV.

HYP'NUM polyan'thos, *Schreber.*

C.

In many reſpects it differs from the *H. filiforme* of *Hudſon*, or *filifolium* of *Withering*, ed. 4. 844.; and therefore, the moſs I have found anſwering moſt minutely the deſcription given by *Schreber*, I have adopted his very appropriate name.

Found on the trunks of very old trees at Mucruſs, Killarney; in its capſular ſtate ſo late as the latter end of the month of Auguſt.

JUNGERMAN'NIA

CCLXXXVI.

JUNGERMAN'NIA aſplenioi'des, *ſpleenwort Jungermannia.* C.—A. P.

In the very wet ſhady parts of the woods at Mucruſs, Killarney, in Auguſt without capſules. I could not diſcover that it was ſweet-ſcented, as obſerved by *Withering.*

CCLXXXVII.

JUNGERMAN'NIA ſcala'ris,

C.

In the wood of St. Catharine's county Dublin, the very ſhady part to the weſt.

CCLXXXVIII.

JUNGERMAN'NIA lanceola'ta, *lanceolate Jungermannia.* C.

On rotten trunks of trees, in a moſt ſhady part of the wood of St. Catharine's, county Dublin.

JUNGERMAN'NIA

CCLXXXIX.

JUNGERMAN'NIA bicuſpida'ta, *forked Jungermannia.* C.

Found in the woods at Mucruſs, Killarney, on ſome old twigs of bramble in Auguſt, but not in fructification.

CCXC.

JUNGERMAN'NIA nemoro'ſa, *fringed Jungermannia.* C.

Met with this rare ſpecies of Jungermannia in a woody ſhady ſituation, near the cottage, Ballynahinch, Cunnamara, in Auguſt; but not in fructification.

CCXCI.

JUNGERMAN'NIA cochlearifor'mis, C.—A. P.

By the ſides of marſhy rivulets, near the middle of the aſcent to Mam Ture mountain, Cunnamara; in fructification in September.

JUNGERMAN'NIA

CCXCII.

JUNGERMAN'NIA triloba'ta, *trifid Jungermannia.* C.

On Lettery mountain, Ballynahinch, Cunnamara, near the ſummit of the mountain, to the eaſt—no appearance of fructification in Auguſt.

CCXCIII.

JUNGERMAN'NIA rep'tans, *creeping Jungermannia.* C.

To be met with in many ſhady moiſt ſituations in woods; but never could detect it in a ſtate of fructification.

CCXCIV.

JUNGERMAN'NIA dilata'ta, *ſcaly Jungermannia.* C.

Very common on the trunks of trees creeping along the bark. I have never met with it in fructification.

JUNGERMAN'NIA

CCXCV.

JUNGERMAN'NIA jula'cea, *ſilvery Jungermannia.* C.—A. P.

Found it growing in very denſe tufts adhering to the large ſlippery ſtones in the aſcent to Mam Turc mountain, Cunnamara, in September; but could not detect any fructification.

CCXCVI.

JUNGERMAN'NIA tricophyl'la, *hairy Jungermannia.* C.

Haller's deſcription, and *Dillenius's* figure, have enabled me to aſcertain this rare ſpecies of Jungermannia; which I found in Auguſt, with no fructification in a heathy turfy ſituation, near Oughterard, county Galway.

CCXCVII.

MARCHAN'TIA hemisphæ'rica, *hemiſpherical Marchantia.* C.—A.P.

Not uncommon, about the crevices of moiſt rocks, on the mountains near Killarney, and in Cunnamara.

RIC'CIA.

CCXCVIII.

RIC'CIA fluitans, *floating branched Riccia.*

A. F.

Sometimes to be met with entangled with other plants on the ſurfaces of ditches. In the fenny ditches, North-wall, county Dublin.

CCXCIX.

LI'CHEN al'bus, *white Lichen.*

C.

On decayed branches of ſmall ſhrubs, and moſſes pretty common. Hoffman obſerves that, when wet, it is often greeniſh, and, when rubbed between the fingers, has an unpleaſant odour.

CCC.

LI'CHEN inca'nus, *mealy Lichen.*

C.

As common as the former, on the ſides of old ditches, on road ſides.

CCCI.

LI'CHEN cinereus, *rock Lichen.*

C.

On lime-ſtone rocks, rather common. It is this Lichen, which appears on various rocks and ſtones, of a greyiſh colour, and ſo minute as hardly to be diſtinguiſhed.

CCCII.

LI'CHEN antiquita'tis, *ſoot Lichen.*

C.

On old walls, and ſome large rocks common; reſembling ſmall points of ink made with a pen.

CCCIII.

LI'CHEN fla'vus, *yellow, or brimſtone Lichen.*

C.

Very old trees, and pales, furniſh it almoſt every where.

CCCIV.

LI'CHEN botryoi'des, *green globuled Lichen.*

C.

On ſhady, moiſt, and generally boggy earth. Until lately the above ſix Lichens were con-

ſidered

ſidered as belonging to the genus *Byſſus;* and will be met with under that generic name, in the various botanical works.

CCCV.

LI'CHEN rugo'ſus, *wrinkled Lichen.*

C.

Very common on the bark of old trees.

CCCVI.

LI'CHEN ſcrip'tus, *lettered Lichen.*

C.

On the bark of very old oaks, but not ſo common as the former; and from which it is eaſily diſtinguiſhed, by the Arabic characters which it aſſumes.

CCCVII.

LI'CHEN fagineus, *beech Lichen.*

C.

On the bark of many trees, common, particularly the beech; hence its trivial name.

CCCVIII.

LI'CHEN calca'reus, *calcareous Lichen.*

C.

On limeſtone rocks, to which it is firmly fixed, rather common. It is reputed to afford a very fine ſcarlet dye. Wherever limeſtone rocks occur amongſt others, they may be diſtinguiſhed at firſt view, by this Lichen growing on it, *Withering.*

CCCVIX.

LI'CHEN immer'ſus, *ſunk Lichen.*

C.

To be found now and then on calcareous rock, Dublin mountains.

CCCX.

LI'CHEN ſanguina'rius, *ſanguineous Lichen.*

C.

I don't conſider this as a ſcarce Lichen, having found two or three varieties of it on rocks and trees. I believe *Hoffman* was the firſt who took notice of the *internal red colour* of the tubercles.

LI'CHEN

CCCXI.

LI'CHEN pilula'ris, *pill Lichen.*

C.

On granite rocks, near Dalkey, and at Howth, county Dublin, a little above the town.

CCCXII.

LI'CHEN cineraſ'cens, *grey Lichen.*

C.

This, the *L. cinereus* of Engliſh Botany, v, 12, 820, pretty common, on large ſtones, and ſometimes on old walls.

CCCXIII.

LI'CHEN con'fluens, *confluent Lichen.*

C.

On rocks, rather common in the Weſt of Ireland; the firſt variety of *Withering, ed.* iv.

CCCXIV.

LI'CHEN quer'neus, *oak Lichen.*

C.

On the trunks of old trees, particularly oaks, not unfrequent.

CCCXV.

LI'CHEN geogra'phicus, *map Lichen.*

C.

Very common on rocks of various ſpecies. I think I have found it on limeſtone, though it is generally ſuppoſed to be confined to granite. Mr. *Gough* obſerves, that it is one of the few Britiſh vegetables, that bear the keen air of Skiddaw's top.

CCCXVI.

LI'CHEN fungifor'mis, *muſhroom Lichen.*

C.

On large rocks, covered with turfmould near Ballynahinch, Cunnamara.

LI'CHEN

CCCVII.

LI'CHEN ericeto'rum, *heath-Lichen.*

C.

On pieces of old damp turf, rather common, with the former.

CCCXVIII.

LI'CHEN verna'lis, *vernal Lichen.*

C.

Common on the barks of trees, especially very old elms.

CCCXIX.

LI'CHEN icmado'phila,

C.

I consider this as a very distinct species from *L. ericetorum*, as the tubercles in this are perfectly sessile; it is as common, and in the same situations.

CCCXX.

LI'CHEN flavo-rubes'cens, *orange Lichen.*

C.

Common on old walls, trunks of trees, and rocks.

LI'CHEN

CCCXXI.

LI'CHEN pertu'ſus, *pierced Lichen.*

C.

Grows with the former frequently.

CCCXXII.

LI'CHEN vento'ſus, *red ſpangled tartareous Lichen.* C.

On Mam Turc mountain, Cunnamara, on the rocks about half way up the mountain.

CCCXXIII.

LI'CHEN coral'linus, *coral Lichen.*

C.

Very ſimilar to *L. calcareus*, and nearly as common on rocks, in mountainous ſituations. Perhaps it may afford the ſame fine ſcarlet dye, as the L. calcareus does ?

LI'CHEN

CCCXXIV.

LI'CHEN Perel'lus, *crab's-eye Lichen.*

C.

This Lichen ſo early known as the days of *Ray* and *Dillenius* to be highly valuable, for the purpoſes of dyeing, is to be found on rocks and ſtones in many mountains and promontories in Ireland—the rocks at Howth, Bullock, Dalkey, county Dublin furniſh it in abundance. " This is the French *Orſeille* or *Orchall*, uſed for dyeing in that country, as L. tartareus is uſed in Scotland, and prepared with volatile alkali in a ſimilar manner; of which a full account is given by Profeſſor Hoffman, from a French work of M. Amoureux of Montpellier, publiſhed 1787, by the Academy of Lyons. The plant is more common in the ſouth of France than with us (England), and is called Perelle d'Auvergne, for ſo M. Amoureux directs us to ſpell it, not *Parelle*, which laſt belongs to ſome ſpecies of *Rumex*. Tournefort in his voyage mentions it by this name, when he deſcribes the L. Rocella at the iſland of Amorgos. The colour furniſhed by L. Perellus has rather more of a violet hue than that of L. tartareus,

reus, but each is capable of being ſo modified as to give any tinge of purple or crimſon," Eng. Bot. v. xi. 727. " *Litmus* is prepared from this ſpecies of Lichen. For this purpoſe it is gathered from the rocks in the north of England, and ſent to London." *Withering, ed.* 4. v. 4. 16.

CCCXXV.

LI'CHEN crenula'tus, *little crenate Lichen.*

C.

Found on rocks in the mountains, near Killarney.

CCCXXVI.

LI'CHEN va'rians, *polymorphous Lichen.*

C.

Agreeable to the account given of this L. in the ſecond volume of Linnæan tranſactions, I don't conſider it as of rare occurrence, having frequently found it on the bark of old trees, particularly on apple and walnut.

CCCXXVII.

LI'CHEN a'ter, *black ſhielded Lichen.*

C.

Very common on old ſtones, and brick walls.

LI'CHEN

CCCXXVIII.

LI'CHEN concen'tricus, *concentric Lichen.*

C.

On many rocks at Howth, Bullock, and Dalkey, county Dublin.

CCCXXIX.

LI'CHEN ſubfus'cus, *brownifh Lichen.*

C.

Common on old walls, and bark of trees.

CCCXXX.

LI'CHEN palles'cens, *pale Lichen.*

C.

On rocks, walls, and trunks of old trees.

CCCXXXI.

LI'CHEN tarta'reus, *tartareous Lichen.*

C.

Rather common on limeſtone rocks. Rev. Mr. Kelly favoured me with ſome beautiful ſpecimens from the county Wicklow. " This Lichen is much uſed in dyeing. The gatherers carefully chooſe ſuch ſpecimens as are of a firm

a firm denſe texture, and they never ſcrape the ſame rock oftener than once in five years. It is prepared for uſe with volatile alkali and alum, but the exact proceſs is kept a ſecret by the manufacturers at Glaſgow; when ſold to the dyers, it appears in the form of a purple powder, called *Cudbear*, (a corruption of *Cuthbert*, the name of its inventor.) This powder, being boiled with woollen yarn, communicates its colour to it, but not to vegetable ſubſtances. The colour is far from permanent," *Eng. Bot.* v. 3. 156. *Smith's Tour on the Continent, vol.* 1. p. 198. " Being common in Derbyſhire, where it incruſts moſt of the ſtones at Urſwic Mere, it is gathered for the dyers by the peaſants, who ſell it for a penny a pound—they can collect 20 or 30 pounds a day. It gives a purple colour," *Withering*.

CCCXXXII.

LI'CHEN obſcu'rus, *obſcure Lichen.*

C.

On large ſtones, near Ballynahinch, Cunnamara.

LI'CHEN

CCCXXXIII.

LI'CHEN mura'lis, *wall Lichen.*

C.

Not uncommon on very old walls.

CCCXXXIV.

LI'CHEN ſtella'ris, *ſtarry Lichen.*

C.

The three firſt varieties of Withering are to be me met with pretty commonly on the old bark of many trees.

CCCXXXV.

LI'CHEN phyſo'des, *inflated Lichen.*

C.

Frequently to be found growing in heathy ſituations, on large ſtones, and old trunks of trees.

CCCXXXVI.

LI'CHEN centrifugus, *ſpreading Lichen.*

C.

On rocks, walls, and trees, frequent.

LI'CHEN

CCCXXXVII

LI'CHEN ſaxa'tilis, *grey ſtone Lichen.*

C.

Common on rocks and ſtones, at Howth, Bullock, Dalkey, &c. I have large ſpecimens full of fructification.

CCCXXXVIII.

LI'CHEN omphalo'des, *purple rock Lichen.*

C.

This ſpecies of Lichen nearly approaches the former, but is eaſily diſtinguiſhed from it by the dark purpliſh brown hue, which L. amphalodes aſſumes. It is uſed by the Highlanders, and Welch, to dye purple and dark brown, as well as L. tartareus already noticed. In the north of Ireland it is uſed for the ſame purpoſes, and is there called *ſtone crottles.* Doctor Patterſon of Derry obliged me with many fine ſpecimens, abounding with ſhields; he informs me, that the rocks on the N. and N. W. coaſts of the province of Ulſter are covered with it.

On

On the rocks at Howth, Bullock, and Dalkey, and many mountainous ſituations, rather common. It is generally known by the name of *Cork*, *Corker*, or *Archell*. The Welſh call it *Kenkerig*—it has been uſed as a ſtyptic, *Withering*.

CCCXXXIX.

LI'CHEN parieti'nus, *yellow wall Lichen*.

C.

Nothing can be more common, attaching itſelf to almoſt every thing.—It is reputed to dye yellow.

CCCXL.

LI'CHEN oliva'ceus, *olive Lichen*.

C.

On the trunks of trees in Santry, Bracken's-town, and Luttrel's-town woods, county Dublin.

CCCXLI.

LI'CHEN pyxida'tus, *cup Lichen*.

C.

All the varieties of Withering to be found on heaths, and about the trunks of old trees covered with moſs; and on old ditch banks common.

LI'CHEN

CCCXLII.

LI'CHEN fimbria'tus, *ſerrated cup Lichen.*

C.

Perhaps it is only a variety of the former, and with which it is frequently found.

CCCXLIII.

LI'CHEN coc'ciferus, *ſcarlet-tipped cup Lichen.*

C.

With the two preceding, common.

CCCXLIV.

LI'CHEN cornu'tus, *horned, or ſkewer Lichen.*

C.

On heaths, with the former very frequently.

CCCXLV.

LI'CHEN cornucopioi'des, *radiated Lichen.*

C.

On moors and heaths with the four preceing; all of which are to be met at, and about Howth, and the mountains of Dublin, &c.

LI'CHEN

CCCXLVI.

LI'CHEN globiferus, *globe Lichen.*

C.

On the rocky mountainous heaths, Killarney, and county Galway.

CCCXLVII.

LI'CHEN fra'gilis, *brittle Lichen.*

C.

Found ſome beautiful ſpecimens with ripe ſhields, full of a ſooty powder, on the rocks, road ſide, near Turk bridge, Killarney, in Auguſt.

CCCXLVIII.

LI'CHEN rangiferi'nus, *rein-deer Lichen.*

C.

Nothing can be more common than this very uſeful Lichen, on all the mountainous heaths. The rein-deer, the entire ſupport of the wandering Laplander, is wholly ſupported by this plant in winter, and on which they will grow fat. It grows in Lapland much more high, than with us, covering the ground like ſnow.

LI'CHEN

CCCXLIX.

LI'CHEN uncia'lis, *ſhort perforated Lichen.*

C.

In the ſame ſituations as *Lichen rangiferinus*, and nearly as common.

CCCL.

LI'CHEN paſcha'lis, *criſp Lichen.*

C.

This is conſidered as a rare Lichen.—Our mountains about Killarney furniſh it in tolerable quantity, and many other high mountains in Ireland. Doctor Smith mentions in his tour on the Continent, vol. 2. 113. that *L. paſchalis* is the firſt beginning of vegetation on lava, and he imagines that it is peculiarly attached to a volcanic ſoil.

CCCLI.

LI'CHEN ſpino'ſus, *prickly diſtorted Lichen.*

C.

I found a few ſpecimens on Purple mountain, Killarney—perhaps it is only a variety of L. uncialis.

LI'CHEN

CCCLII.

LI'CHEN furca'tus, *forked Lichen.*

C.

Found with the former; and on Mangerton, and Turc mountain, Killarney.

CCCLIII.

LI'CHEN hir'tus, *common rough Lichen.*

C.

Very common on old fruit-trees.

CCCLIV.

LI'CHEN pubes'cens, *pubescent Lichen.*

C.

Found some specimens with ripe shields on the top of Purple mountain, Killarney—perhaps my specimen is the *L. lanatus* of English Botany?

CCCLV.

LI'CHEN vulpi'nus, *fox Lichen, or gold wiry Lichen.* C.

Frequently to be met with in woods on the old trunks, and branches of trees.—On apple trees.

It is ſuppoſed to dye woollen yellow, and when mixed with glaſs, powdered to poiſon wolves; the glaſs in the compoſition would appear to me, to be the effectual poiſon, or deſtroyer of thoſe animals.

CCCLVI.

LICHEN plicatus, *ſtringy Lichen.*

C.

Found but very ſparingly on the branches of trees, in the very cloſe ſhady part of the woods at Mucruſs, Killarney, without ſhields in Auguſt.

CCCLVII.

LICHEN floridus, *flowery Lichen.*

C.

On very high trees in the old part of the wood of St. Catherine, county Dublin; and in ſome of the old woods about Killarney.

In Nicholſon's Journal for September 1801, ſome directions are given by Earl Dondonald for extracting gum from tree moſs, by which, I ſuppoſe, his Lordſhip means the *L. plicatus*, and this, the *L. floridus*—however it is obſerved that all the Lichens, particularly moſt of the ſtringy Lichens, collected from different trees and ſhrubs, may have a mucilage extracted

from

from them by water, which will answer all the purposes of a solution of gum.

In his Lordship's paper is given a statement of the benefit and advantages, which may ensue to individuals by the discovery of extracting *gum from tree, or stringy Lichens*, as a substitute for Gum Senegal, and other foreign gums, used for calico printing, preparing of ink, staining and manufacturing of paper, dressing and stiffening of silk, &c.

CCCLVIII.

LI'CHEN farina'ceus, *ragged mealy Lichen.*

C.

Very like the *L. calicaris* (*L. fastigiatus* of *Acharius*), and rather common on the branches of many trees; my specimens are furnished with a few shields.

CCCLIX.

LI'CHEN calica'ris, *channeled Lichen.*

C.

Abundantly on the rocks at Howth, Bullock, Dunleary, county Dublin; and many other places on the rocks, near the sea coasts.

It is reputed to dye a red colour equal to the famous Lichen Rocella, *Dyer's Lichen*, or *Orchall*, and which latter, as an article of trade,

is considered as of very great consequence, for dyeing wool, or silk, any shade of purple, or crimson. For this purpose it is steeped in volatile alkali. " Doctor Smith observes, that in times of scarcity *Orchall* has been sold for £1000 a ton!—Lightfoot in his Fl. Scot. asserts, that *L. calicaris* was formerly used instead of starch to make hair powder."

CCCLX.

LI'CHEN prunas'tri, *ragged hoary Lichen.*

C.

Rather common on the branches, and trunks of very old trees. " It has a remarkable property of imbibing and retaining odours, and is therefore the basis of many perfumed powders, *Withering*. It is reputed to dye yarn of a red colour.

CCCLXI.

LI'CHEN Islan'dicus, *Iceland, or eryngo leaved Lichen.* C.

Found in small quantities on Mushara mountain, Cork road to Killarney; and on the very summit of Mam Turc, Cunnamara.

It is considered as a great restorative, and for some time back has been a fashionable remedy in consumptive complaints.

LI'CHEN

CCCLXII.

LI'CHEN pulmona'rius, *lungwort Lichen.*

C.

Upon the trunks of old trees in many very ſhady woods.

"Uſed on the Continent not unſucceſsfully in a decoction with milk to cure coughs. It is bitter, aſtringent, and mucilaginous, and promotes expectoration. Like many other Lichens, it dyes wool brown; ſome ſay of a deep orange." Eng. Bot. v. viii. 572.

CCCLXIII.

LI'CHEN cilia'ris, *ciliated Lichen.*

C.

Very common on different ſpecies of trees.

CCCLXIV.

LI'CHEN furfura'ceus, *branny Lichen.*

C.

Found in a very withered ſtate on the trunk of a very old tree, near Stream's-town, Cunnamara, in very ſmall quantities.—Were it not for the very accurate deſcription, and excellent

excellent figure given of it in Eng. Bot. vol. 14. 984. I could never have aſcertained my ſpecimen.

CCCLXV.

LI'CHEN tenel'lus, *delicate Lichen.*

C.

Common on black thorn, and ſometimes on ſtones.

CCCLXVI.

LI'CHEN fraxin'eus, *aſh Lichen.*

C.

To be met with on trunks of many ſpecies of trees.

CCCLXVII.

LI'CHEN læte-vi'rens, *bright green Lichen.*

C.

Rather common in many parts of Ireland.—On aſh trees, near Derry.

LI'CHEN

CCCLXVIII.

LI'CHEN capera'tus, *wrinkled sulphur Lichen.*

C.

Very common on stones and rocks; particularly on granite at Howth, Bullock, Dalkey, &c.—It is used to dye wool of an orange colour.

CCCLXIX.

LI'CHEN scrobicula'tus, *pitted Lichen.*

C.

Common on mossy dry rocks in the different mountains, Cunnamara; and rather sparingly on those about Killarney.

CCCLXX.

LI'CHEN plum'beus, *lead-coloured spongy Lichen.*

C.

On the trunks of old trees near Ballynahinch, and Mam Turc mountain, Cunnamara.—Near Derry.

LI'CHEN

CCCLXXI.

LI'CHEN anthra'cinus,

C.

I forgot to mark the *habitat.*

CCCLXXII.

LI'CHEN polyrrhi'zos, *ſinged Lichen, or duſky rock Lichen.*

On rocks near the ſummit of Purple mountain, Killarney; and on Mam Turc, Cunnamara.

CCCXXIII.

LI'CHEN puſtula'tus, *bliſtered Lichen.*

C.

On a rock called the Man of War, but ſparingly, lake of Killarney—a beautiful red colour may be prepared from it, according to *Linnæus.* And it may be converted into an exceeding fine black paint, *Withering.*

CCCLXXIV.

LI'CHEN probos'cideus, *fringed button Lichen.*

C.

Some few ſpecimens on quartzy rocks, in the aſcent to Mac-Gilly Cuddy's reeks, Killarney.

CCCLXXV.

LI'CHEN minia'tus, *gray cloudy Lichen.*

C.

Mr. Bradbury obliged me with ſome ſpecimens, found on lime-ſtone rocks, at Clopook, between Athy and Stradbally.

CCCLXXVI.

LI'CHEN perla'tus, *pearly Lichen.*

C.

The large ſtones near the ſalmon wier Ballynahinch, Cunnamara, are covered with this Lichen; and tho' I examined many ſpecimens, I could not detect a ſingle ſaucer.

CCCLXXVII.

LI'CHEN cani'nus, *ash coloured ground liverwort.* C.

A very common Lichen on heaths, stony places, banks of ditches, &c.—This is the plant so highly celebrated in the days of Doctor Mead, for the cure of canine madness, and formed one of the chief ingredients of his *Pulvis antilyssus*. The pretty variety γ of *Hudson*, I found on the island, immediately next Bilberry island, Lough Corib.

CCCLXXVIII.

LI'CHEN polydac'tylos, *many fingered ground liverwort.* C.

This has been considered until lately as a variety of the former, and I think with some degree of justice—it is the var. δ of Hudson. Common near the summit of Mam Turc, Cunnamara.—I fancy it may be considered as a scarce Lichen.

LI'CHEN

CCCLXXIX.

LI'CHEN resupina'tus, *reversed Lichen.*

C.

Has a strong resemblance to Lichen caninus—on the mossy roots of trees, on the mountains near Killarney.

CCCLXXX.

LI'CHEN sylvat'icus, *wood Lichen.*

C.

In great abundance on the banks of the shady ditches, road immediately leading from the Man of War to Rush, beyond the barracks, county Dublin.

CCCLXXXI.

LI'CHEN horizonta'lis, *brown horizontal Lichen.*

C.

In the woody mountains, on rocks, near Killarney.

LI'CHEN

CCCLXXXII.

LI'CHEN nigres'cens, *bat's wing Lichen.*

C.

On the trunks of old aſh, and ſycamore, not unfrequent, in many ſwampy woods.

CCCLXXXIII.

LI'CHEN orbicula'ris, *Necker* 88.

C.

I am indebted for the name of this Lichen to the very ingenious and induſtrious cryptogamiſt, Mr. Dickſon, of Covent Garden, London, to whom I ſent a ſpecimen—he informs me it is a rare one.

On the bark of an old elm tree, to the S. W. of Shane's Caſtle wood, county Antrim.

CCCLXXXIV.

TREMEL'LA al'bida, *whitiſh Tremella.*

C.

On decayed branches of trees in woods, frequently.

TREMEL'LA

CCCLXXXV.

TREMEL'LA adna'ta, *livid Tremella.*

C.

Rocks on the ſea ſhore.

CCCLXXXVI.

TREMEL'LA arbo'rea, *witches butter.*

C.

Common on decayed wood.

CCCLXXXVII.

TREMEL'LA meſenter'ica, *plaited yellow Tremella.*

C.

Found now and then on putrid wood, or bark of trees.

CCCLXXXVIII.

TREMEL'LA Nos'toc, *ground Tremella, or ſlough ſtar jelly Tremella.* C.

On the ſides of gravel-walks, after wet weather, and ſometimes in paſtures.

" This ſingular production has given riſe to many ſtrange ideas. The vulgar ſuppoſe it

it the remains of a fallen ſtar, or of a Will-o'-the-wiſp. Some Italian philoſophers have miſtaken it for a gelatinous ſubſtance, which is nothing more than the remains of frozen frogs, as Dr. Withering has very ſatisfactorily ſhewn, and thence it was by chemical analyſis proved to be an animal! Others have made a ſimilar miſtake reſpecting young aquatic ſnails." Eng. Bot. v. 7. 461. Smith's tour on the Continent, v. 3. 150.—The ancient alchemiſts termed this Tremella *the flower of heaven*, and flattered themſelves with the hopes of its proving an univerſal menſtruum, Fl. Scot. v. 2. 199.

CCCLXXXIX.

FU'CUS nodo'ſus, *knobbed Fucus, or ſea whiſtles.*

Very common on all our rocky ſhores. The oval bladders on this fucus crack with ſome degree of report, when trodden on. Oyſters are covered with it, to keep them alive and moiſt.

CCCLXXXX.

FU'CUS veſiculo'ſus, *bladder Fucus, or common ſea wrack.*

Rather more common than the former; growing on the ſea rocks, or thrown on the ſhore.

ſhore. It is ſubject to many varieties, moſt of which are to be found on our ſhores. F. veſiculoſus is much uſed as a manure, and, by burning, it is converted into that ſubſtance called *kelp*, ſo valuable in the ſoap and glaſs buſineſs. The medicine, called *Vegetable Æthiops*, is prepared by calcining this plant in the open air. Much more could be mentioned of its value, did the preſent publication admit of it; but in the ſecond volume of Fl. Scot. 905, many intereſting particulars of this ſea wrack are to be met with. One however of much conſequence I ſhall notice, "In the iſlands of *Jura* and *Skye*, it frequently ſerves as a winter food for cattle, which regularly come down to the ſhores at the receſs of the tides to ſeek for it."

A curious circumſtance attends this fucus; if its leaves receive any injury or fracture, if the plant be in a vigorous ſtate, abundance of young leaves are thrown out from the injured part.—If even a ſmall aperture be made in the middle of a leaf, a new one ariſes from either ſide of it, *Withering*.

In the *Nereis Britannica* of Mr. Stackhouſe, a very intereſting and ſcientific analyſis of this fucus occurs; and, as I believe but very few are in poſſeſſion of that gentleman's valu-

able

able work in this kingdom, I feel it muſt afford much gratification to the philoſophiſing chemiſt, to ſtate the reſult of this curious and beautiful analyſis of F. veſiculoſus.

Five hundred grains being expoſed to a red heat for three hours, in a glaſs coated retort, connected with a receiver, and a pneumatico-chymical apparatus; the following ſubſtances were obtained.

			Grains.
Water,			138
Ammoniac,			90
Charcoal,			86
Empyreumatic oil,			54
Soda,			18, 5
Magneſia,			14
Silex,			1, 5
Iron,			0, 3
Muriatic acid,			6, 5
Sulphuric acid,			4, 5
Sulphur,			4, 5
Carbonic acid gaſs,	137	cubic inches	60
Oxygen gaſs,	39		13
Hydro-carbonate gaſs,	81		2
Azotic gaſs,	16		3
	267		495, 8
		Loſs,	4, 2
			500

FU'CUS

CCCLXXXXI.

FU'CUS filiquo'ſus, *podded Fucus.*

Not ſo very common as the two former; however our ſhores, and ſea rocks afford it pretty abundantly.

CCCLXXXXII.

FU'CUS kalifor'mis, *ſaltwort Fucus.*

A few ſpecimens of this new ſpecies of Fucus, ſo accurately figured in the 9th vol. Eng. Bot. 640. I found on the beach at Aughris, Cunnamara, the moſt weſtern point, I believe, of Ireland.

CCCLXXXXIII.

FU'CUS ſerra'tus, *ſerrated Fucus, or wrack.*

Very common on all our ſhores, and varies much in ſize; ſometimes it occurs above two feet high. "Baſter obſerves, that thisp lant it preferred by the Dutch fiſhermen, for packing up their lobſters, to F. veſiculoſus, from which ſo much more mucus exudes, that is apt to corrupt them," *Turner's Synopſis of Britiſh Fuci.* vol. 1. 1157. Lightfoot in his Fl. Scot. v. 2. 903, takes notice of this circum-

 ſtance.

ſtance. "At Cromer in Norfolk, it is uſed for the ſame purpoſe; and ſome ſailors there, whom Mr. Wigg and Mr. Turner once ſaw buſily engaged in ſeparating thoſe fiſh from each other with it, when aſked why they employed ſo much trouble on the matter, replied, "that it was not only to keep them moiſt, but to hinder them from fighting, which they would do without a preventative." It is ſuppoſed to afford leſs alkaline ſalt, than F. veſiculoſus.

CCCLXXXXIV.

FU'CUS ſanguin'eus, *red dock-leaved Fucus.*

Pretty commonly caſt between the rocks on the ſhore at Cuſtrower bay, Aughris, and Renvi, Cunnamara. I found a few ſpecimens on the ſhore near Bray head.

CCCLXXXXV.

FU'CUS ru'bens, *red oak-leaved ſerrated Fucus.*

Our ſea coaſts abound with this ſpecies of fucus. The very correct figure given of it in *Stackhouſe's Nereis Britannica t.* 7. muſt put it beyond every poſſibility of miſtake hereafter. But the *F. ſinuoſus* of Eng. Bot. v. 12. 822, as referring to the F. rubens of Stackhouſe, muſt, I humbly conceive, cauſe ſome confuſion; the two

two plates being very diſſimilar.—However highly I reſpect, eſteem, and admire the author of Eng. Bot. I cannot avoid taking this liberty, which I hope he will pardon. Our variety I take to be the γ of Turner's Synopſis, "*quercifolius, laciniis rotundatis, marginibus ſubnudis,*" and the Engliſh name *oak-leaved*, I conſider as truly characteriſtick.

CCCLXXXXVI.

FU'CUS Hypoglos'ſum,

This very elegant and rare ſpecies of fucus, ſo accurately deſcribed, and depicted in the 2d vol. Linn. Trans. 30. t. 7, was found amongſt other rejectamenta between the rocks at Aughris, Cunnamara. I could procure but a few ſpecimens, which at firſt ſight I conſidered as varieties of Fucus ſanguineus.

CCCLXXXXVII.

FU'CUS ala'tus, *winged Fucus.*

In the waters between the rocks, left by the receſs of the tides, rather common. I have ſome ſpecimens attached to F. veſiculoſus.

CCCLXXXXVIII.

FU'CUS ſacchari'nus, *ſweet Fucus, or ſea belt.*

Upon our ſea coaſts very common— I have meaſured a plant of this leathery fucus, above three feet long. "It derives its name from the circumſtance of its leaves, after they are dried, if not ſufficiently waſhed and kept from the air, being often covered with a whitiſh efflorescence ſimilar in appearance to ſugar, and which, if ſlightly applied, leaves upon the palate a ſweetiſh taſte, but, as Gmelin has obſerved, is nothing more than ſalt, and, if taken in too great a quantity, has the effect of irritating the bowels. The ſame author has obſerved on the authority of Pallas, that in ſome parts of the ſea coaſts of England it is cooked, and eaten as a pot-herb; and that the inhabitants of Iceland boil it in milk, and make it into a pottage; or ſteep it in freſh water, expoſe it in a dry ſunny place till it is hard, then put it up in wooden veſſels till in time it acquires a white colour, and is as ſweet as ſugar, when they eat it with butter." *Turner's Synop.* v. 2. 206. Similar circumſtances are recorded of it in Lightfoot's Fl. Scot. v. 2. 942, with this addition, "that cattie feed, and

and get fat upon this ſea wrack, both in its recent and dry ſtate, but their fleſh acquires a bad flavour." Mr. Stackhouſe obſerves that F. ſaccharinus, when dry, and ſuſpended in an airy place, forms an admirable hygrometer, and preſerves its qualities for years.

CCCLXXXXIX.

FU'CUS digita'tus, *fingered Fucus, ſea girdle, hangers.*

Plentifully on almoſt all our coaſts. "Biſhop Gunner obſerves, that in Nordland the ſtems and fronds of young ſpecimens are boiled and given to cattle, and that the former are ſometimes eaten by men; that the dried ſtalks, in Lofoten and Veſteraalen, are employed for fuel, and in a putrid ſtate uſed, as in the United Kingdom to manure the fields." *Turner.*—Every ſpecies of fuci may be uſed with advantage as a manure for land. Mr. Stackhouſe ſays, that this fucus forms an eſſential article of the huſbandman's attention after a ſtorm, being a very bulky plant. He obſerves, (and I know it to be the fact) that the ſize of ſome of the larger ſtalks is equal to that of a walking ſtick, and as incorruptible as a cabbage ſtump.

Five

Five hundred grains of this fucus were treated exactly in the ſame way, and with the ſame degree of heat, as the F. veſiculoſus, and yielded as follows:

			Grains.
Water,			427
Charcoal,			14
Soda,			10
Muriatic acid, with a ſmall quantity of ſulphuric acid,			9
Empyreumatic oil,			6
Magneſia,			3
Silex and Iron,			0, 5
Sulphur,			1, 5
Azotic gas,	45, 5	cubic inches	14, 5
Oxygen gas,	23,		7, 5
Carbonic acid gas,	11,		4, 5
	82, 5		497, 5
		Loſs	2, 5
			500

The difference of the reſult under the retort of the two common ſpecies, the one *ſucculent*, the other *coriaceous*, muſt appear ſurprizing—the preſent fucus containing 5-6th parts of water; and the other the F. veſiculoſus not quite 1-4th part, which muſt ariſe from the great

great quantity of mucus this ſucculent ſpecies (F. digitatus) contained within its external coats. This likewiſe contained only 82, 5 cubic inches of different gaſes, while the F. veſiculoſus yielded 267. The ſoda in F. digitatus was little more than half the quantity of what was found in the F. veſiculoſus, and the empyreumatic oil, more than 1-9th, or 6 to 54.

From this ſtatement it clearly appears to Mr. Stackhouſe that, contrary to the generally received opinion among farmers, the *coriaceous* ſpecies of fuci are preferable as *manure* to the *ſucculent* ſpecies.

CCCC.

FU'CUS polyſchi'des, *great furbelowed hangers.*

Nearly as common as the former, and with which it has been frequently confounded. The very admirable figure in Nereis Brit. t. 4. of this fucus, muſt remove every poſſibility of doubt, of its being a very diſtinct ſpecies, when contraſted with the F. digitatus, t. 3. of the ſame work. I have adopted the trivial name *polyſchides*, in preference to *bulboſus*, tho' the latter term has been ſanctioned by a *Turner*.

Lightfoot in Fl. Scot. obſerves, that this fucus has ſometimes grown ſo large, that a ſingle ſpecimen has been a load for a man's ſhoulders; and

and Mr. Stackhouſe informed Dr. Withering, that he has known the plant to weigh from twenty to thirty pounds or more." In the Scilly iſlands, and on ſome ſpots in the weſt of Cornwall, this ſpecies, with the other large ſucculent ones, are burnt in conſiderable quantities to make *kelp*."

Dr. *Goodenough*, and Mr. *Woodward*, in their obſervations on Britiſh Fuci, *Linn. Tranſ.* v. 3. 155. mention, that this and the preceding ſpecies grow to a vaſt ſize, from one to five yards. I never could detect it of the latter ſize on our ſea ſhores.

CCCCI.

FU'CUS canaliculátus, *channelled Fucus.*

Rather common on the rocks in various parts of our coaſt.

CCCCII.

FU'CUS criſpus, *buckſhorn Fucus.*

I have adopted the trivial name given to this fucus by Mr. Turner, in preference to that ſo commonly made uſe of, *ceranoides*; as he has moſt ſatisfactorily proved, that the *F. ceranoides* of Linnæus is quite a different plant.

I wiſh I could be as well ſatisfied as to the varieties of this ſpecies, noticed by this ingenious

nious gentleman, nine in number; and though I have ſeveral by me, which I conſider as ſuch, I will not at preſent hazard an opinion, but barely ſtate, that the very common varieties are frequently to be met with on our rocky ſhores.

CCCCIII.

FU'CUS phylli'tis, *heart's-tongue Fucus.*

Found in pools of ſhallow water, on the coaſt, near the Giant's cauſeway.

The ſpecimens, which I have been fortunate enough to meet with, I conſider as the true variety β of TURNER's SYNOPSIS—*fronde apicem verſus dilatatâ ſub-cuneiformi*"—the *Fucus phyllitidis folio* of *Ray*. The ſtem is ſhort, round, and horny; and the roots are fibrous, woody, and creeping; agreeing exactly with Mr. Stackhouſe's deſcription of theſe parts.

CCCCIV.

FU'CUS edúlis, *eatable Fucus.*

Found in ſmall quantities on the coaſt, amongſt the rocks, beyond Bray head.

My ſpecimens are of a deep and opaque blood-red, and about the ſize and cuneiform ſhape of the ſmaller fronds of Mr. Stackhouſe's figure, *Ner. Brit.* t. 12.

"It

"It is eatable when raw, which is hardly the case with some other fuci. It is also eaten after being pinched with hot irons, and then tastes like roasted oysters."

In the islands of the Archipelago, the natives have a curious way of dressing fish with this fucus: "they take slices of fish, and stew them with crow garlic, chopt small; when tender, some lard, or any animal fat, is added; and, lastly, a handful or more of this fucus, called by them *Marvei*, is put on, which not only gives a most beautiful purple tinge to the ragout, but dissolves, and thickens the sauce so much, that, when cold, the jelly is strong enough to support a spoon, or any other thing placed in a perpendicular direction."—*Gmelin. Hist. Fuc.* 190. *Ner. Brit.* 59.

"But the most surprising quality of this plant, and one that will probably render it of service in dyeing, was discovered by Mr. Stackhouse by accident. Having placed some of the leaves to macerate in sea water, in order to procure seeds from it, he perceived on the second day a faint ruby tint, very different from the colour of the plant, which is a dull red, inclining to chocolate colour. Being surprised at this, he continued the maceration, and the tint grew more vivid, till at last it equalled the strongest infusion of cochineal. This liquid was mucilaginous, and had a remarkable

markable property of being of a changeable colour, as it appeared a bright ruby, when held to the light, and a muddy ſaffron, when viewed in a contrary direction. He adds, that a chemical friend of his (the Rev. W. Gregor) aſſured him, that he procured a *fine lake* from an infuſion of it, by means of alum."—*Ner. Brit.* p. 58. Mr. Turner obſerves, that the quality of yielding by maceration a fine colour is common alſo to many other algæ, and in the higheſt degree obſervable in *Conferva ſetacea*, which, after it has been kept only a very ſhort time in freſh water, gives out nearly the whole of the fine *lake tinted fluid*, with which its tubes are filled, and remains an almoſt colourleſs, diaphanous membrane."

When moiſtened after having been dried, this ſpecies of fucus more particularly exhales a violet ſcent. *Eng. Bot.* v. 19, 1307.

CCCCV.

FU'CUS dentátus, *indented Fucus.*

Found near the Giant's cauſeway, amongſt rejectamenta thrown in from the ſea; and between Balbriggen and Skerries, county Dublin.

The urceolate capſules, noticed by Mr. Turner in his Synopſis of Britiſh Fuci, Introduction xxv, appear to be very accurately figured in the laſt faſciculus of Mr. Stackhouſe's *Nereis Britannica*,

Britannica, tab. 15; and in which plate a figure of the plant itſelf is well repreſented.

CCCCVI.

FU'CUS lacerátus, *endive-leaved Fucus.*

Is pretty common on our ſea ſhores, on rocks and rejectamenta thrown on the ſhore.

Except as to colour, the figure in *Eng. Bot.* v. 15. 1067, is very characteriſtic of this plant, as it occurs on our ſhores.

CCCCVII.

FU'CUS laciniátus, *jagged Fucus.*

I by no means conſider this as a variety of the former, differing in many reſpects from it. See *Eng. Bot.* v. 15. 1068.

Found many ſpecimens on the coaſt, near the Giant's cauſeway.

CCCCVIII.

FU'CUS ciliátus, *ciliated Fucus.*

Not uncommon on our coaſts, Ruſh, Balbriggan, Howth, Bullock, &c. county Dublin. "This fucus reſembles *F. ſaccharinus*, in the property whence that ſpecies derives its name; and, if dried, without ſufficient care being taken to waſh out all ſaline particles, will always

ways be covered with a ſimilar whitiſh efflo-reſcence."—TURNER.

CCCCIX.

FU'CUS pinnatifidus, *pinnatifid Fucus.*

Found covering ſome rocks in the ſea, on the coaſt, near Balbriggan and Ruſh. My ſpecimen is the var. α. *Ner. Brit.* t. 11. I could not diſcover that acrid and unpleaſant taſte, and peculiar ſmell, which are attributed to it; perhaps I did not put it to the teſt, in a ſufficiently recent ſtate.

CCCCX.

FU'CUS filum, *thread Fucus*, or *ſea laces.*

Common on all our ſea coaſts. Mr. Stackhouſe ſays, that he has meaſured it ſeventeen feet long. I have met with ſpecimens very long indeed. It is worthy of remark, that the common people, who conduct the kelp kilns on the Cunnamara coaſt, a great kelp ſhore, obſerve, that the kilns, which are more abundantly ſupplied with this fucus, yield the greateſt quantity of *kelp*, and of a better quality. A ſeries of comparative experiments, inſtituted to aſcertain the relative value of each ſpecies of our common ſea wrack, as to their individual produce of alkaline ſalt, would be highly

highly interesting, and worthy of the attention of the Dublin Society.

CCCCXI.

FU'CUS bifurcátus, *bifurcated Fucus.*

This the *F. tuberculatus* of *Eng. Bot.* v. II. 726, was found closely adhering to the rocks, by rather a broad base, at the Giant's causeway; and, if I do not mistake, on the top of the basaltic columns in the sea, immediately at the end of the causeway.

CCCCXII.

FU'CUS lumbricális, *worm-like Fucus.*

Very common upon almost all our sea coasts. It is the *F. fastigiatus* of *Hudson*, *Lightfoot*, and *Withering.*

CCCCXIII.

FU'CUS sedoídes, *stone crop Fucus.*

I have adopted Mr. Stackhouse's trivial name *sedoides*, because his description accords with my specimens in many particulars; I wish I could say as much for his figure. But on carefully looking over *Gmelin. Hist. Fuc.* there are none of his figures, by any possibility of fancy, which bear the least resemblance to the specimens

ſpecimens in my poſſeſſion, but that in tab. 18. fig. 4.

Found on the ſhore, within about a mile of the Giant's cauſeway.

CCCCXIV.

FU'CUS aculeátus, *prickly Fucus.*

Rather common upon our ſea ſhores, Ruſh, Balbriggen, Howth, &c. county Dublin.

CCCCXV.

FU'CUS purpuraſcens, *purpliſh Fucus.*

Were it not for the ſubgloboſe tubercles innate in the ramuli, I ſhould have been tempted to ſet my ſpecimens down as the *F. aſparagoides* of *Eng. Bot.* v. 8. t. 571. and to which they bear a very ſtrong reſemblance indeed. Found on the coaſt, near Bray head.

CCCCXVI.

FU'CUS plicátus, *matted Fucus.*

Rather common on our ſea ſhores, Ruſh, Balbriggen, Howth, &c. county Dublin.

CCCCXVII.

FU'CUS confervoídes, *conferva-like Fucus.*

Frequently on our ſea ſhores.

FU'CUS

CCCCXVIII.

FU'CUS córneus, *horny Fucus.*

All the varieties, noticed in Mr. Turner's Synopſis of Britiſh Fuci, are to be met with on the weſtern coaſt of Ireland; indeed, I may again add, the very weſtern point, Aughris, Cunnamara. The variety β *nereideus* of Lightfoot, ſparingly between the rocks, on the ſhore at Ruſh, county Dublin, amongſt the rejectamenta thrown in from the ſea.

CCCCXIX.

FU'CUS coccinéus, *ſcarlet Fucus.*

Very common on all our ſea ſhores. I found this beautiful fucus, in a full and perfect ſtate of fructification, on the ſhore at Balbriggen, in September.

CCCCXX.

UL'VA pavónia, *ſtriated laver.*

This elegant laver, or *Turkey feather*, as it is ſometimes called, ſo very correctly figured in *Ellis's Corallines*, t. 33. c. was found ſticking to the ſea rocks, near Aughris, Cunnamara. In the 147th n. v. 18. *Eng. Bot.* 1276, lately publiſhed, a very good figure of *U. pavonia* occurs, but

but the colouring of the ſtripes is not ſo brilliant as it appeared in the ſpecimens I met with.

CCCCXXI.

UL'VA lactúca, *oyſter green, green ſloke.*

On our ſea ſhores, and ſalt water ditches, common.

The oyſter green is frequently eaten in the ſame manner as the following, the true ſloke.

CCCCXXII.

UL'VA umbilicális, *navel laver*, or *ſloke.*

Upon the ſea rocks, and ſhores, frequent. This is that ſubſtance, ſtewed with a little water, which is ſold about our ſtreets by the name of *ſloke.*

CCCCXXIII.

UL'VA palmáta, *palmated*, or *ſweet laver.*

Rather common on ſea rocks, ſtones, and ſea ſhores.

The various ſpecimens I have met with, induce me to follow Withering's example, by calling it an ulva. In the 19th vol. of Engliſh Botany, 1306, it occurs, under the name of *Fucus palmatus, palmate fucus*, or *dulſe.* The author obſerves, that it is ſold in the markets

at Edinburgh, and eaten raw an hour or two before dinner.

The *U. palmata* is what the Irish call *Dulish*, the Scotch *Dills*, and the English *Dulls*, or *Dulse*, and, after being soaked in fresh water, is eaten dried. "Bishop *Gunner* states, in his *Flora Norvegica*, that this plant, which is supposed to be his *Fucus ovinus*, or *caprinus*, is employed in the fattening sheep and goats, who seek it with much avidity, and betake themselves in great numbers eagerly to the sea shore, at the reflux of the tide, to obtain this pleasant plant."—TURNER *Syn.* v. 1. 180.

CCCCXXIV.

UL'VA compressa, *thread, and tape laver.*

All the varieties, so very accurately described in Lightfoot's Fl. Scot., and correctly figured in Hist. Mus. Dillen. t. 9, f. 8. A. B. C. D. E. and t. 10. f. 8. F. G., are to be found common on our sea shores, adhering to various substances. Nay, agreeable to the great Linnæus's observations, on thatched houses, and not within the spray of the sea.

CCCCXXV.

UL'VA intestinalis, *gut laver*, or *sea chitterling.*

Frequently to be met with in stagnant pools, by the sea side. The broad variety, resembling the

the mesentery noticed by Dillenius, Hist. Mus. 47., I found on the strand at Balbriggen.

CCCCXXVI.

CONFER'VA rivuláris, *crow silk, hairy river weed, common floating silk Conferva.* A. L. F.

Common in gently flowing brooks, and rivers.

CCCCXXVII.

CONFER'VA fontinális, *spring Conferva, small byssus like Conferva.* A. L. F.

Grows in tufts, frequently forming a spongy mat, on the sides of springs and fountains, of various colours, rather common.

CCCCXXVIII.

CONFER'VA bullósa, *ditch, or bubbled cotton Conferva.* A. P.

Rather common in most stagnant and putrid waters.

So early as the year 1741, the laborious and accurate Dillenius, in his admirable work, the Hist. Musc. 18. observes, that this conferva, properly collected and dried, would answer as tow or cotton for a variety of purposes. Lightfoot, in 1777, says, that he saw a coarse kind of paper made of it at Edinburgh.

CCCCXXIX.

CONFER'VA littorális, *ſoft long ſea Conferva.*

Frequently on rocks and ſtones in the ſea, and ſea water pools, ſome inches long, of a pale green colour.

CCCCXXX.

CONFER'VA tomentóſa, *ruſty flock ſea Conferva.*

On the Cunnamara coaſt common, adhering to the ſea rocks. On the baſaltic pillars in the ſea, Giant's cauſeway.

CCCCXXXI.

CONFER'VA æruginóſa, *ſea green Conferva.*

On the rocks, near the Giant's cauſeway; and Aughris, Cunnamara, adhering to fuci.

CCCCXXXII.

CONFER'VA ſcopária, *bruſh Conferva, brown Conferva, feathered ſea Conferva.*

I don't conſider it as a common ſpecies, having found it but ſparingly, on the ſhore, near the Giant's cauſeway; and now and then on the coaſts near Dublin. As Dillenius obſerves,

ſerves, *Merret* not inaptly likens it to a fox's tail.

CCCCXXXIII.

CONFER'VA capilláris, *marſh thread*, or *thread Conferva*.

Frequently in the marſhy ditches, near the ſea ſide.

CCCCXXXIV.

CONFER'VA fucícola.

To be met with frequently on *Fucus nodoſus*; as Major Velley, the firſt diſcoverer and deſcriber of it, has obſerved in his COLOURED FIGURES OF MARINE PLANTS.

CCCCXXXV.

CONFER'VA ſetácea, *briſtly Conferva*.

Found ſome ſpecimens of this delicate conferva, between the rocks, near Bullock, Skerries, and Ruſh, county Dublin.

This is the conferva, which, Mr. Turner obſerves, yields a fine lake-coloured fluid, on being macerated in freſh water for a ſhort time; and which circumſtance I more particularly noticed before, at page 154, when ſpeaking of Fucus edulis.

I could

I could not perceive the very intolerable odour, which Major Velley ſays this ſpecies of conferva emits, when recent.

CCCCXXXVI.

CONFER'VA polymórpha, *black tufted Conferva.*

On our rocky ſhores, generally adhering to ſome of the larger fuci. It is by no means confined to F. nodoſus and F. veſiculoſus.

CCCCXXXVII.

CONFER'VA rúbra, *red Conferva.*

Adhering to fuci, very common on our ſea ſhores.

CCCCXXXVIII.

CONFER'VA purpuras'cens, *purple Conferva.*

On rocks, and ſticking to fuci, nearly as common as the former.

CCCCXXXIX.

CONFER'VA nodulóſa, *knotted Conferva.*

I found many beautiful ſpecimens on the ſhore, near the Giant's cauſeway. I think it is very probable, that the C. rubra, C. purpu-

raſcens,

raſcens, and C. noduloſa, will turn out to be the ſame.

CCCCXL.

CONFER'VA diaphána, *red dotted Conferva.*

This very delicate and beautiful ſpecies of Conferva, I found very ſparingly in the baſons of ſea water, between the rocks on the coaſt, near Balbriggen.

CCCCXLI.

CONFER'VA plumóſa, *red feathered Conferva.*

I was for ſome time puzzled to know what ſpecies of conferva to refer this elegant plant to, but, on looking over Lightfoot, I found his deſcription to correſpond ſo exactly with my ſpecimen, that I have ventured to ſet it down, as the *plumoſa* of his Flora Scotica.

On the ſhore, at Aughris, Cunnamara.

CCCCXLII.

CONFER'VA coccinea, *ſcarlet Conferva.*

Very common on our ſhores.

I cannot conſider this as the C. plumoſa of Lightfoot; and, by doing ſo, I know I differ from very high authority; but the ſpecimen of what I conſider the *plumoſa* of Lightfoot, which I found on the coaſt of Cunnamara, differing

in

in ſo many particulars from the *C. cocciuea*, will, I truſt, be my juſtification.

This fucus, or rather conferva, on account of its beauty and brilliant bright red colour, and minute diviſions of its foliage, is the ſpecies, which ladies employ to mimic landſcapes.

CCCCXLIII.

MERU'LIUS umbelliferus, *Bolton* 39. C.

This very delicate and minute muſhroom is very abundant amongſt moſs and decayed vegetable ſubſtances, in Bracken's-town wood, county Dublin, in Auguſt,

CCCCXLIV.

MERU'LIUS androsáceus, *Sowerby* 94. *black ſtalked agaric.* C.

Near the grotto, in Luttrell's-town wood, county Dublin, on rotten oak leaves, in July.

CCCCXLV.

MERU'LIUS Cantharel'lus, *Sowerby* 46. *cantarelle agaric.* C.

Common in our woods—Luttrell's-town, Santry, Deer park, county Dublin, &c. in September.

It is obſerved by Withering, that the lovers of muſhrooms may eat this with ſafety, but it is

is more tough, and leſs highly flavoured, than either the Ag. orcades, or Ag. campeſtris.

CCCCXLVI.

MERUL'IUS ſquamûla, *Sowerby* 93.

On decayed ivy leaves, in the wood of St. Catharine's, county Dublin, in April.

CCCCXLVII.

AGA'RICUS ebur'neus, *Sowerby* 32.

C.

Amongſt the graſs, in the paſture ground, near Santry wood, county Dublin, in Auguſt.

This agaric or muſhroom, which varies much in ſize, has in every ſtate the appearance, and the feel of ivory. *Withering*.

CCCCXLVIII.

AGA'RICUS Liſtéri, *Sowerby* 104.

C.

Found in the ſouth woods of the Deer park, county Dublin, in Auguſt. I have adopted Withering's trivial name, inſtead of *piperatus*, by which this muſhroom has been commonly known, as he has convinced me, that the A. piperatus of Linnæus is a different plant. It abounds with a milky juice, which is hot and acrid, and perhaps may be conſidered amongſt the moſt ſuſpicious of the whole tribe.

AGA'RICUS

CCCCXLIX.

AGA'RICUS ſca'ber, *Sowerby* 207.
C.

Growing in cluſters, of a tawny claret colour, in a tan bed, at the Botanical garden, Glaſnevin, June 1803.

CCCCL.

AGA'RICUS caſta'neus, *brown agaric*, *Bolton*. 22.
C.

In Bracken's-town wood, county Dublin, common in May.

CCCCLI.

AGA'RICUS trilo'bus, *Bolton* 38.—*A. badius*, *Withering*. C.

In a pot, with turf-mold and ſand, in a tan bed of one of the hot houſes at the Botanical garden, Glaſnevin, June 1803.

CCCCLII.

AGA'RICUS lactif'luus, *Sowerby* 204.
C.

In the pine groves, Moore Abbey, Marquis of Drogheda's, county Kildare—Auguſt. The milky

milky juice, with which it abounds, is commonly mild, but leaves a biting taſte in the throat.

CCCCLIII.

AGA'RICUS amethys'tinus, *violet agaric.* *Sowerby* 187. C.

In the ſhady ſloping ground to the North, at the Botanic garden, Glaſnevin.

CCCCLIV.

AGA'RICUS cras'ſipes, *Sowerby* 129. C.

At the baſe of old oaks, Bracken's-town wood, county Dublin, July.

CCCCLV.

AGA'RICUS integer, var. 6. *Withering.* C.

This, the A. luteus of Hudſon, is to be found growing under trees, to the eaſt of Santry wood, county Dublin; September.

CCCCLVI.

AGA'RICUS elephan'tinus, *Sowery* 36. C.

Bracken's-town wood, county Dublin; October.

AGA'RICUS

CCCCLVII.

AGA'RICUS tortilis, *Bolton* 41. *a.*
C.

Very common in kitchen gardens, under the ſhade of large leaves.

CCCCLVIII.

AGA'RICUS limacinus, *Sowerby* 7.
C.

Rather common in hilly aſpects; in October.

CCCCLIX.

AGA'RICUS creta'ceus, *Sowerby* 2.
C.

Abundantly in the bark beds of the Botanical garden, Glaſnevin, in Auguſt,—when in a decaying ſtate, it emits a very fetid odour. I have no doubt of its being the *A. confertus* of Bolton.

CCCCLX.

AGA'RICUS or'cades, *Sowerby* 127.
C.

Some paſtures fields and groves abound with this muſhroom, in form of what are called *fairy rings*.

Withering

Withering obſerves, that his 3d variety is not the *Mouceron* of the French, though often uſed in France inſtead of that; and as it may be procured plentifully, and its fine flavour will probably ſoon introduce it to our tables, particularly in catſups and in powder, he takes much pains to guard us againſt errors, which may be committed by thoſe who are intruſted to gather it. See *Withering ed.* 4. *vol.* 4. 218,219.

CCCCLXI.

AGA'RICUS cla'vus, *Bolton* 39.
C.

Found amongſt moſs in Santry wood, county Dublin, July.

CCCCLXII.

AGA'RICUS campe'ſtris, *common muſhroom; Sowerby* 305. C.

Common in paſtures, which have not been ploughed for ſome years.

This is the muſhroom in ſo much demand for the table, and which varies ſo much in ſize, and ſometimes in colour—the field plants are certainly more delicious and tender, than thoſe raiſed in hot beds.

AGA'RICUS

CCCCLXIII.

AGA'RICUS ſulcatus, *velvet ſtalked agaric.* *Bolton* 135. C.

This, the *A. velutipes* of *Bolton*, is very common, growing in cluſters, on ſtumps of rotton wood.

CCCCLXIV.

AGA'RICUS lu'teus, *yellow cottony agaric.* *Sowerby* 2. C.

In the bark beds at Glaſnevin, with the *A. cretaceus*, and which, (agreeing with Mr. Sowerby), I conſider only as a variety of A. cretaceus, or his A. cepæſtipes.

CCCCLXV.

AGA'RICUS auran'tius, *orange agaric.* C.

Common in elevated dry and barren paſtures, in October. The figures of Curtis and Bolton appear to be very diſſimilar, though referred to as the ſame, by Withering. Our plant is the one figured by Bolton, not but I have met with that, ſo admirably delineated in the Flora Londinenſis, rather common.

AGA'RICUS

CCCCLXVI.

AGA'RICUS cinnamo'meus, *Sowerby* 205. C.

To the ſouth of Bracken's-town wood; in May.

CCCCLXVII.

AGA'RICUS fimipu'tris, *var.* 2. *Withering.* C.

Frequently in the graſs, in paſture fields in September.

CCCCLXVIII.

AGA'RICUS faſcicula'ris, *bundled agaric. Bolton.* 29. C.

Amongſt old timber in wood-yards, rather common; in October.

CCCCLXIX.

AGA'RICUS turbinátus, *var.* 2 *Withering.* C.

This, the A. fuliginoſus of Hudſon, growing in numbers together, under the trees, at Bracken's-town wood; in Auguſt.

AGA'RICUS

CCCCLXX.

AGA'RICUS cylindri'cus, *Sowerby* 189—*egg agaric.* C.

I have met with this mushroom from May to October, in a variety of grounds. Very common to the north, near the walks, amongst the garden sweepings, botanic garden, Glasnevin. A young plant put into water, and covered with a glass bell, grew three inches and a quarter in twelve hours, *Withering*.

CCCCLXXI.

AGA'RICUS cinereus, *Bolton* 20—*mourning agaric.* C.

In well manured meadows, and on dunghills, rather common in the month of July.

CCCCLXXII.

AGA'RICUS plica'tilis, *plaited agaric. Fl. Lond.* 201. C.

To be met with frequently growing on grass plots, in July.

AGA'RICUS

CCCCLXXIII.

AGA'RICUS campanula'tus, *Withering*.
C.

Both the varieties in Santry wood, in September—the ſecond, on the ſtumps of old rotten trees to the eaſt of the wood.

CCCCLXXIV.

FISTULI'NA hepa'tica, *Sowerby* 58.
C.

The boletus hepaticus, or *liver boletus*, is now and then to be met with on periſhing trunks of trees, particularly on oak, and ſometimes in the hollows of living trees very late in ſummer, in the woods of the Phœnix park.

Bolton ſays, it is of the eſculent kind, and that it taſtes like lamb's fleſh, but how far it is to be truſted he is doubtful, and Sowerby obſerves that it taſtes like our common eatable muſhroom, and ſome reckon it nearly as good. It takes its name from its reſemblance to a liver, and is replete with a blood-coloured fluid.

CCCCLXXV.

BOLE'TUS bovi'nus, *Sowerby* 175. C.

This, the *brown boletus*, is pretty common in Bracken's-town wood, and many other woods in the county of Dublin, in Auguſt.

Sowerby obſerves, that it is a favourite food with the Ruſſians and Poles, who have many ways of cooking and pickling it, and that he had got ſome from thence pickled, and highly ſpiced.

CCCCLXXVI.

BOLE'TUS ſquamo'ſus, *ſcaly Boletus. Sowerby* 266. C.

Frequently to be met with of various ſizes, growing in a pendulous poſition, and many together on the ſides of various ſpecies of trees, near their baſe. I met with a ſpecimen in Luttrel's-town wood, county Dublin, in the month of July, meaſuring from ſide to ſide, in the broadeſt part, above twenty inches, and from the root to the extreme edge nearly as many more.

BOLE'TUS

CCCCLXXVII.

BOLE'TUS ſubero'ſus, *white cork Boletus.* *Bolton* 162.—*Sowerby* 288. C.

On ſtumps of trees rather common, continuing frequently the whole year; ſtumps of aſh trees to the north of the botanical garden, Glaſnevin.

CCCCLXXVIII.

BOLE'TUS verſicolor, *Bolton* 81--*Sowerby* 229--*ſtriped, or variegated Boletus.* C.

To be found in imbricated zoned cluſters adhering to decayed wood, or bark, generally the whole year, in various ſituations.

CCCCLXXIX.

BOLE'TUS ſulphu'reus, var. 2. *Withering.*—*Sowerby* 135. C.

This the B. tenax, or tough boletus of Bolton, is by no means common. I found it ſparingly on the ſide of an old elm tree, to the ſouth of Bracken's-town wood, and on the ſame kind of tree behind my former houſe in Capel-ſtreet, Dublin, in a N. E. expoſure.

CCCCLXXX.

BOLE'TUS ignia'rius, *Sowerby* 132.
C.

This, the *touchwood boletus*, is to be found now and then on the trunks of old trees, in the woods of the Deer park, and Bracken's-town, county Dublin.

Lightfoot obſerves that, when the upper rind is peeled off this boletus, and the remainder pounded and boiled with ſaltpetre, it makes an excellent touchwood; and in Franconia they beat the inner ſubſtance into the form of leather, and ſew it together for garments.

It is from this boletus, the *Agaric*, formerly ſo celebrated for ſtopping hermorrhages, is made, but which the chirurgical dexterity of this day has in a great meaſure ſuperſeded the uſe of.

CCCCLXXXI.

BOLE'TUS oliva'ceus, *Withering*, 312.
C.

This boletus is very correctly figured and deſcribed in Bolton 84; and I conſider the term, *olivaceous*, much more expreſſive of our ſpecimens, than that of *luteus* by Hudſon, Lightfoot, Bolton, &c.

Found

Found to the ſouth of Bracken's-town wood, in the month of Auguſt.

CCCCLXXXII.

HELVEL'LA mit'ra, *curled Helvella. Sowerby* 39.
C.

In a wood to the weſt of the Phœnix park, near the private gate leading to Luttrel's-town demeſne, in April; and in a wood, to the eaſt, Luttrel's-town, in Autumn.

CCCCLXXXIII.

AURICULA'RIA ferrugi'nea, *Sowerby* 26.
C.

Rather common, adhering to the bark of the dead branches, and ſtumps of trees near the ground, for a good part of the year.

CCCCLXXXIV.

NIDULA'RIA companula'ta, *Withering.*
C.

Some beautiful ſpecimens of this plant, the Peziza lentifera, or lentil Peziza of Bolton, 102, Nidularia lentifera of Sowerby 28, were ſent to me by Mr. Pennick, Bellview, county Wicklow; which he found in the month of July, growing in the open air, and in a peach

peach houſe, at a root of a vine in a pot, under the ſhade of a peach tree.

CCCCLXXXV.

PEZI'ZA cer'ea, *Sowerby Fung. t.* 3.
C.

On tan beds, in the hot-houſes of the botanical garden, Glaſnevin; July 1803.

CCCCXXXVI.

PHAL'LUS eſculen'tus, *Sowerby* 51.
C.

The *eſculent morel*, is rather a ſcarce muſhroom with us; and I was agreeably ſurpriſed to find it growing in a perfectly wild ſtate under the hedges, at the Botanic garden, Glaſnevin, April 1801.

It is much eſteemed, either freſh or dried, in ſavoury diſhes, and will keep in the latter ſtate for many years.

CCCCLXXXVII.

PHAL'LUS impudi'cus, *ſtinking morel. Fl. Lond.* 194.—*Bolton* 92.—*Sowerby* 329. C.

Common in the woods at Caſtletown, Leixlip, county Dublin, under the hedges; and now and then in the woods of the Phœnix park.

It

It has occurred two or three times at the northern ends of the beds, in the herbaceous division of the botanic garden, Glasnevin.

It is readily nosed by its intolerably fetid smell, in wet summer months, in its bursting state. Doctor Withering observes, that those, who have courage to smell it closely, will find it much less disagreeable than at a distance, for it then seems to have a slight pungency like that of volatile salts; its odour soon pervades a whole house.

CCCCLXXXVIII.

TRICHIA nuda, *Sowerby* 50. *Bolton* 93. 1.
CLATHRUS *nudus*. C.

On the stump of an old elm tree, in the shade, near the sloping ground to the north of the botanical garden, Glasnevin. June 1803.

CCCCLXXXIX.

CLA'VARIA hypox'ylon. *Sowerby*, 55.
C.

The *flat horned clavaria* is very common upon rotten stumps of trees, assuming the various forms noticed by Bolton, 129. On very old rotten wood, &c. at the foot of the shady sloping ground to the north of the botanic garden, Glasnevin, frequent in November.

LYCOPER'DON

CCCCXC.

LYCOPER'DON Próteus. *Withering.* C.

The many varieties of *Lycoperdon bovista*, or common puff ball, so very aptly termed by Dr. Withering *Proteus*, (for it assumes a variety of forms, and appearances,) are to be met with pretty commonly in pastures, woods, and meadows.

Many authors have noticed the narcotic quality of the very large variety of this lycoperdon, and on that account it has been used sometimes to take a hive without destroying the bees; by pressing and drying it in an oven, it forms a kind of tinder, the smoke of which intoxicates these industrious creatures. Lightfoot says, that in Italy specimens have been found, weighing twenty-five pounds, and measuring two yards in circumference. Withering says, that it is used to carry fuel in from a distance. Whether it has a styptic quality, more than any other dense spongy substance, is much to be doubted?

CCCCXCI.

LYCO'PERDON globóſum. *Bolton* 118.
C.

This, *the globe puff ball* of Bolton, is as common as the former, and I have my doubts, whether it ſhould not be conſidered as a variety of the common puff ball? Bolton ſays it is never to be found in woods, or in company with L. boviſta, in any of its forms, that it may be eaten with ſafety, and has a taſte much like that of our common muſhroom.

CCCCXCII.

RETICULA'RIA hydnoi'des.
C.

This very delicate paraſitical muſhroom, in ſubſtance like a cobweb, would have been paſſed by unnoticed by me, had not Mr. Stackhouſe mentioned his having found it on the leaves of *Veronica Chamædrys*, or wild germander, and on which I have obſerved it frequently.

RETICULA'RIA

CCCCXCIII.

RETICULA'RIA ſegetum, *ſmut*, or *duſt brand*. *Sowerby*, vol. 2. 139, 140? C.

This ſubſtance, ſo generally known by the name of ſmut, and which is to be found on ſeveral kinds and ſpecies of grain and graſs, is now aſcertained to be a minute and paraſitical muſhroom, ſeveral ſpecies of which are ſuppoſed to occaſion the ſeveral ſpecies of blights. The French call it *Ergot*.

In the fifth vol. of Linn. Tranſact. p. 112. are to be found many intereſting particulars on this ſubject, by the Rev. W. Kirby, F. L. S. and amongſt the reſt the following.

This gentleman has noticed a few ſpecies of this very minute paraſite. The firſt is our Reticularia ſegetum, or ſmut, and which in England is called *duſt brand*, *ſmut*, or *burnt corn*, a ſpecies common to wheat, oats, barley, and rye, is ſcentleſs, and conſumes not only the farinaceous part of the grain, but even the chaff—barley and oats are more commonly attacked by it than wheat, on account of the latter being uſed dreſſed for ſowing.

The next ſpecies is called *pepper brand*, *brand*, or *bladders*; this ſpecies conſumes only the farinaceous part of the grain, which aſſumes a deep and dingy hue, and, being crumbled, emits

emits a very fetid ſcent, like putrid fiſh, which diſtinguiſhes it from the former; it is conſidered as very prejudicial to the farmer.

The next ſpecies, Mr. Kirby notices, is that known to agriculturiſts by the name of *red gum* (ÆCIDIUM), which throws forth a powder of a bright orange colour—this minute muſhroom does not appear to be materially injurious to the grain, if at all.

Another, he obſerves, which is very common on wheat, the *Uredo frumenti*, *Sowerby* 140, grows on the ears, ſtraw, and chaff, burſting in longitudinal ſtreaks from under the epidermis or ſkin; this is repreſented as the *blight* of the wheat, and which in certain ſoils and ſeaſons is ſo very injurious to that grain.

The next Mr. Kirby notices is one, which the wheat, in certain parts of England in the year 1797, ſuffered very conſiderably by, which the farmers call *blight* or *mildew*, and by far the worſt enemy to the wheat—the ears injured by it were diſtinguiſhed at a conſiderable diſtance by their blackneſs, and on cloſer examination they appeared as if ſoot, or ſome ſmutty powder, had been thrown upon them; the chaff appeared covered with ſmall black dots, very different in appearance from the *uredo frumenti* on the ſame part; he obſerves, that wheat ſeized with *mildew* is only fit food for ſwine or poultry; and that, on examining a mildewed

a mildewed ear with a lens, the appearances did not ſo fully convince him of its being a fungus, as the other ſpecies did; however, he ſeems inclined to believe it is one, becauſe ſome foreigner, who had expreſsly written on the ſubject, aſſerts, *that the mildew is a very minute lycoperdon, or puff ball.*

Upon the whole then it would appear, that the *blight* or *mildew* is the moſt deſtructive ſpecies of *Reticularia*, *Uredo*, *Æcidium*, *Lycoperdon*, or call it what we may; and Mr. Kirby very juſtly laments, that ſome method has not yet been found out to prevent the blight, as effectually as that, which has long been in uſe amongſt farmers, to ſecure their crops from the brand, (Reticularia ſegetum.)

It is neceſſary to obſerve, that the very ingenious eſſay, in the 6th vol. Linn. Tranſ. p. 75. "Obſervations on Aphides, or blighting inſects, as being the principal cauſe of blights in plants," has nothing whatſoever to do with the preſent ſubject; indeed the eſſay alluded to has not even hinted at the judicious remarks, made by Mr. Kirby, in the 5th vol. of the ſame tranſactions, publiſhed in 1800.

This very pains-taking gentleman obſerves, that the farmers in England uſe many preparations for dreſſing their ſeed, in order to prevent the evil of the *pepper brand;* ſuch as a lixivium of wood aſhes and urine; ſalt and water only

only, or ſalt water if at hand; lees from the ſoap boilers; urine and cheeſe whey; and he believes that all the farmers dry their ſeed with *freſh* ſlacked lime. This cuſtom, which is univerſal in the eaſt of England, Mr. Kirby obſerves, would ſeem to prove, that the diſeaſe originates from the adheſion of the ſeed or duſt of the brand to the ſeed of the wheat; and though he is convinced, from every information he has received, that ſome of the grain, nay a conſiderable quantity, *does* periſh by the uſe of lime, yet he very pointedly aſks, is the evil incurred greater than the evil prevented?

To prove that the practice of dreſſing the ſeed, previous to ſowing, is a very effectual preventative againſt the brand, Mr. Kirby details ſome experiments made with that view, ſuch as wâſhing the wheat carefully with ſpring water, and afterwards wiping it with a ſoft dry cloth; dipping it in ſtrong white wine vinegar, and afterwards allowed to dry; covering the grain with ſalt water, and after letting it remain in it for twelve hours, it was wiped as before; the reſult was, that the wheat thus managed ſuffered very little injury from the *brand*; the wheat, which was ſimply waſhed with water, produced the greateſt number of plants, and that wetted with vinegar the ſmalleſt number; but it does not appear that any lime was uſed in the experiment, though

Mr.

Mr. Kirby apprehends, that lime is the moſt efficacious preventative againſt the evil, although, as before obſerved, the moſt deſtructive of the ſeed; that *freſh ſlacked lime* is more effectual than *air ſlacked lime*, is proved by a conſiderable loſs, which a farmer ſuffered (£300) by uſing the latter with ſalt water, in the dreſſing of his wheat at a particular period, and for reaſons unneceſſary here to relate, though it was always his cuſtom before to dreſs his ſeed with *freſh ſlacked lime* and ſalt water, and the event was ſucceſsful. It is well worthy of attention, that *old wheat*, uſed for ſeed, is not ſubject to the brand. As ſimply waſhing the ſeed with water, if it be carefully wiped afterwards, anſwers the end of ſteeping it in more expenſive preparations, though attended with ſome difficulty on a large ſcale; and as it ſeems all that is neceſſary for guarding againſt the evil, is to have the ſeed thoroughly cleaned previous to ſowing; Mr. Kirby recommends wetting the ſeed with water, and afterwards drying it with freſh ſlacked lime.

As a further proof, Mr. Kirby informs us, that a medical gentleman, who nas now taken to farming, aſſured him, that ſince he has dreſſed his wheat, he has *never* ſuffered by the *pepper* brand; and ſo convinced is he of the utility of the common method, that he is determined

termined to prepare barley and oats in the ſame way, in order to prevent the *duſt* brand."

In the Annals of Agriculture, Bath Papers, and many other periodical publications, on agriculture, a variety of methods are recommended againſt the ſmut: I ſhall notice one by a Mr. Gordon, in the Bath papers for the year 1799, vol. 9th, as perhaps it is not generally known; this gentleman recommends vitriolic acid, and, from the reſult of ſome experiments which he made, he is induced to think that the diſeaſe is communicated by infection; that the vitriolic acid deſtroys the infection; that the quantity of this acid ſufficient is one to thirty of water; that a much greater quantity of the acid may be uſed with ſafety; that the ſeed ſhould not be ſuffered to dry after it is taken out of the ſteep; that the ſeed may remain in the ſteep ſome time without danger; he has ſuffered it to remain in the ſteep for twenty hours, for reaſons unneceſſary here to mention. The quantity of acid uſed is by meaſure, as one gallon of the acid to thirty gallons of water; and he directs, that the ſeed ſhould not be put into the ſteep, until the great heat, occaſioned by the mixing of the acid with the water, is entirely gone off."

I have ſomewhat ſtrayed, I fear, beyond the limits allowed me in the preſent publication, which muſt be excuſed, as I conſider the ſub-

ject

ject highly interesting, and of great national import. I have, therefore, in a very brief point of view indeed, collected such information, as I conceived worthy of being communicated, on so very great an evil as the smut; at the same time, I by no means hold myself responsible for any opinion or advice given on a subject of so very great consequence.

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